

FLIGHT

The
AIRCRAFT
ENGINEER
and
AIRSHIPS

First Aero Weekly in the World

Founder and Editor: STANLEY SPOONER

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport

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DIARY OF FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in the following list:—

1925

- July 26-Aug. 9 Vauville Light 'Plane and Glider Meeting.
Aug. 1-3 Royal Aero Club Race Meeting at Lympne.
Sept. 19-28 F.I.A. Conference at Prague.
Oct. 8 Aero Golfing Soc. Autumn Meeting, Walton Heath.
Oct. 24-29 Schneider Cup Race, Baltimore, U.S.A.

1926

- Aug. Light Aeroplane Competition.

EDITORIAL COMMENT.



THE Royal Aero Club is to be congratulated upon the meeting which has been arranged for this week-end. If one may judge by the list of entries, published in this issue of FLIGHT, and by the official programme, the three days at Lympne should prove among the most interesting events of recent years. No less than 25 machines have been entered, of which there is reason to believe that practically all will face the starter. Few of the machines are, it is true, of very modern type, but, on the other hand, visitors to Lympne will have an opportunity of comparing some fairly old aeroplanes with some of the most recent type, a fact which should in itself lend interest to the proceedings. While on the subject of the competing machines, it may not, perhaps, be amiss if we explain, for the benefit of those of our readers who are not familiar with the system of identification, the manner in which the identification letters are arranged, and their significance. Great Britain has been allocated the initial letter "G," and in the identification of British aeroplanes this letter must be followed by a vowel: the one chosen being "E." When the present system of identification came into force, the first machine registered received the identification G-EAAA; the next one received the letters G-EAAB, and so on, until G-EAAZ had been reached. A fresh start was then made with G-EABA, and so forth. It will thus be seen that from the identification letters which a machine carries, one is able to form a fairly accurate estimate of its "period." To take an example, G-EACZ is obviously fairly old, in view of the fact that it is in the "A" series. Also it is obviously the last of the EAC series, and the next one following it would be EADA. Perhaps these brief notes on registration letters may serve to indicate that the apparently meaningless jumble of letters is in reality very significant, and once this fact is pointed out it becomes possible to form a much clearer conception

of the probable age of any machines carrying civilian registration letters.

With reference to the Lympe meeting itself, all the events originally scheduled are still on the programme, with the one exception of the Inter-Club race for D.H. "Moths." This event has had to be abandoned owing to the fact that a sufficient number of machines could not be finished in time to make this event worth while, and it, therefore, had to be cancelled. There are, however, still so many interesting events on the programme that visitors should have little cause for complaint, the more so as arrangements have been made to fill up the time between races with various exhibition flights, parachute descents, &c. The Royal Aero Club has been criticised for choosing Lympe as the site for the August meeting, and there is little doubt that an aerodrome nearer to London would have been preferable. On the other hand, it must be realised that the problem of adequately housing close on thirty aeroplanes is one that has to be taken into consideration, not to mention the question of repair facilities of which machines as well as engines may be in need. It is perfectly true, of course, that Lympe is rather out of the way, except in relation to the few south-coast seaside resorts of the immediate vicinity. As regards Londoners, the journey to the Lympe Aerodrome is a somewhat tedious one, and doubtless from this point of view, Croydon, Hendon or Stag Lane would have been preferable. There is, however, much to be said for Lympe from the practical flying point of view. Not only is shed accommodation available and all sorts of repair facilities, but the Lympe course offers very great advantages to competitors and to the public. The triangular course used is one affording numerous fields suitable for forced landings, and all but the very fastest racing machines can be assured of finding landing grounds almost anywhere along the course. From the spectators' point of view, the Lympe course is particularly suitable, because of the fact that the machines are within sight almost throughout, so that it becomes very much easier to follow the progress of events. In view of the large number of machines taking part, and taking everything into consideration, we think that in this instance the Royal Aero Club acted wisely in choosing Lympe. That any smaller events which may be

held later on in the season should take place at Hendon or one of the other London aerodromes, we are quite prepared to admit, and if that is done we do not doubt that the London public will show its appreciation by turning up in considerable numbers.

With reference to the various events scheduled to take place during the three days' meeting, there is little need for comment here, as they have been referred to elsewhere in this issue. From the very fact that the machines range in power from 400 h.p. down to about 25 h.p. it is obvious that the majority of events have necessarily had to be handicaps. There are, however, two scratch speed races for light 'planes which, although they have not attracted a very large entries list, will, nevertheless, be of considerable interest, particularly the race for two-seaters.

The decision to grant certified performance certificates for light 'planes is one thoroughly to be commended, and from the list of events it will be seen that the greater part of Sunday, August 2, will be devoted to the establishment of such officially observed tests. Although these are not, of course, in the nature of races, they will be extremely well worth watching, especially that of greatest speed over 3 kilometres, which will, presumably, be flown under F.A.I. rules, *i.e.*, two flights down-wind and two flights up-wind.

It is greatly to be regretted that but one single foreign competitor, *i.e.*, the Pander monoplane, has been entered for Lympe. It had been hoped that several German machines would have taken part, but no entries have been received; the reason for this is not easy to ascertain. Probably the question of expense has entered largely into the matter, but it is just possible that the attitude of certain sections of the German Aeronautical Press may have had something to do with it. Several German aviation journals have expressed themselves against participation in the English air races, probably on account of the recent terms of restriction imposed on German aircraft. Whatever the reason, British sporting aviation circles will greatly regret the absence of the German machines. That no French machines have been entered is, of course, explained by the fact that the French are themselves holding a light 'plane meeting at Vauville at the present time, where all their available light 'planes are participating.

THE SOCIETY OF BRITISH

Mr. T. O. M. SOPWITH, C.B.E., has been re-elected Chairman of the Society of British Aircraft Constructors for the year 1925-26, while Capt. P. D. Acland and Mr. H. T. Vane, C.B.E., have been re-elected Vice-Chairmen. Squadron-Commander James Bird has been re-elected Hon. Treasurer.

The Committee of Management for the current financial year is composed as follows: Chairman, Mr. T. O. M. Sopwith, C.B.E. (H. G. Hawker Engineering Co., Ltd.); Vice-Chairmen: Capt. P. D. Acland (Vickers, Ltd.), Mr. H. T. Vane, C.B.E. (D. Napier & Son, Ltd.); Hon. Treasurer, Squadron-Commander James Bird (the Supermarine Aviation

AIRCRAFT CONSTRUCTORS

Works, Ltd.); Messrs. R. Blackburn (Blackburn Aeroplane & Motor Co., Ltd.), R. A. Bruce (Westland Aircraft Works), H. Burroughes (Gloucestershire Aircraft Co., Ltd.), A. E. L. Chorlton, C.B.E. (Wm. Beardmore & Co., Ltd.), C. R. Fairey, M.B.E. (The Fairey Aviation Co., Ltd.), H. G. fiske (Boulton & Paul, Ltd.), Basil Johnson (Rolls-Royce, Ltd.), John Lord (A. V. Roe & Co., Ltd.), F. Handley Page (Handley Page, Ltd.), E. B. Parker (Short Bros.), J. D. Siddeley, C.B.E. (Armstrong-Siddeley Motors, Ltd.), C. C. Walker (De Havilland Aircraft Co., Ltd.), and Sir Henry White Smith, C.B.E. (Bristol Aeroplane Co., Ltd.).

Melbourne-Tokyo Flight

FOR the third time since he resumed the second stage (Melbourne-Tokyo) of his big flight has the Marchese de Pinedo been held up. He started off from Sydney for Brisbane on July 25, but engine trouble brought him back again two hours later. He made a short flight shortly after, but engine trouble still prevailed, so he had to postpone his departure until matters could be set aright.

Air Escort for U.S. Fleet in Australia

WHEN the U.S. Fleet, headed by the battleship "Seattle," visited Sydney (Australia) Harbour on July 23 it was escorted by five aeroplanes.

Tokyo-London Flight

ON July 25 two Breguet biplanes (400 h.p. Lorraine-Dietrich engines) piloted by two well-known Japanese aviators—Maj. Abe and Mr. Kawachi (? Shinbara) left Yoyogi aerodrome, near Tokyo, on the big flight to London, *via* Siberia and Moscow, organised by the "Asahi" newspaper. They arrived at Osaka at 11.30 a.m., and left again at 8.5 a.m. on July 27, arriving at Tachiarai at 11.15 a.m.

British Aircraft Carrier for China

H.M. AIRCRAFT CARRIER "HERMES" left Malta on July 15 for China, calling at Marsascirocco *en route* to pick up machines and Flight 440.



R.A.C. 1925 AUGUST MEETING AT LYMPNE

THE Royal Aero Club August Meeting at Lympne has drawn an exceedingly good entries list, no less than 25 machines having been entered for the various races, and the majority of which will, undoubtedly, be taking part. The course over which the various races will be flown is a triangular one of approximately 12½ miles, with turning points at Postling and Hastingleigh. As neither of the two turning points is situated very far from the Lympne aerodrome, the competing machines should, provided the visibility is reasonably good, be in sight almost the whole time. Flying will take place on all three days commencing about 10 a.m. on each day. In order to enable visitors to ascertain the speed of the machines over the course, we have prepared the accompanying graph in which speed in m.p.h. is plotted on a base of time. As each of the small divisions represents three seconds, it should be possible from the chart to obtain a reasonably correct estimate of the speed of the machines, at any rate, sufficiently accurate for amateur timing.

PROGRAMME OF EVENTS

No less than thirteen different events are scheduled for the three days' meeting, so that there should be plenty for

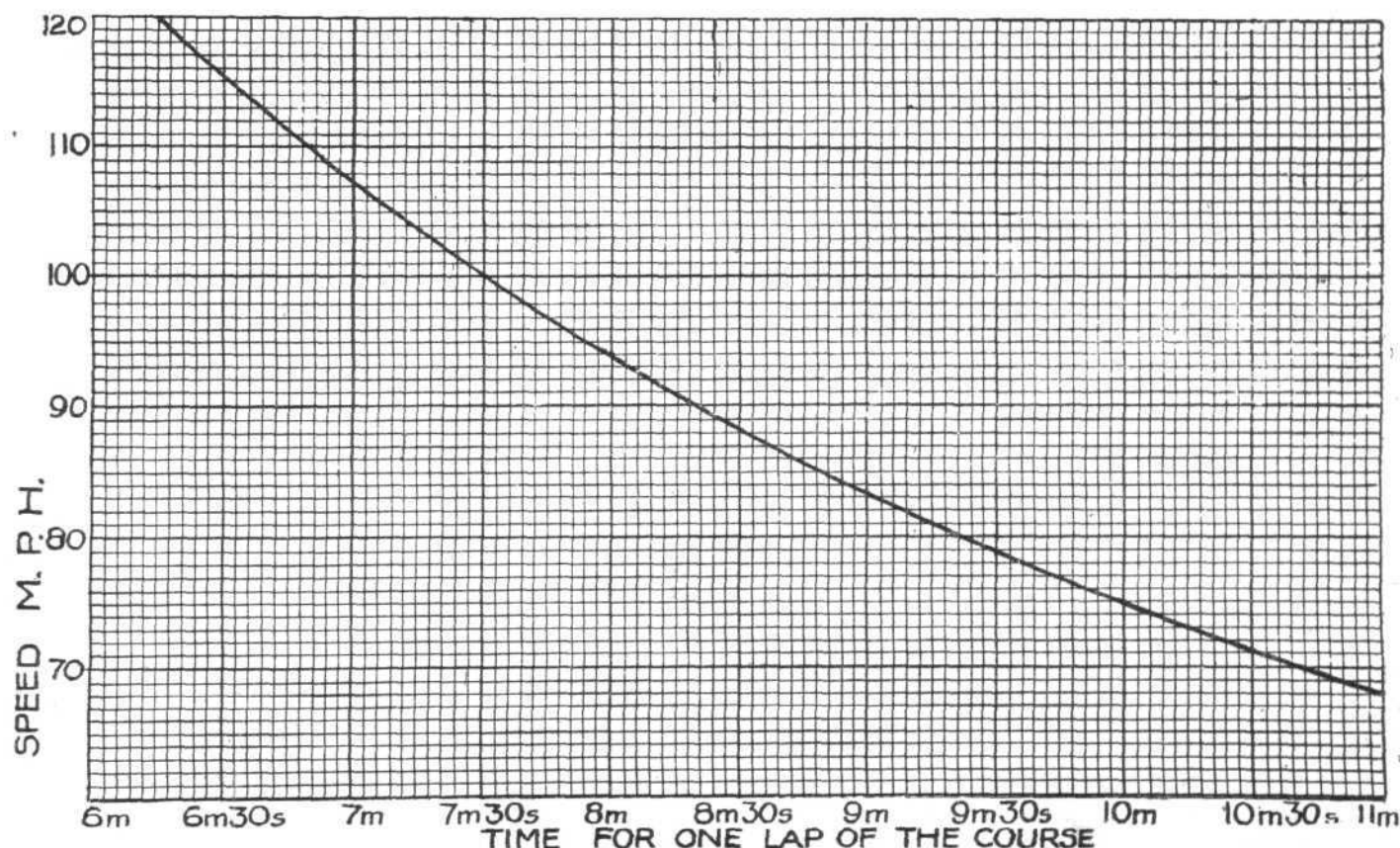
visitors to see. They can be assured of not being bored since various spectacular events will fill up the interludes between races. In the space at our disposal, it is not possible to give a very detailed reference, to each event, but the following summaries may be of interest:—

SATURDAY, AUGUST 1

Event No. 1, which will be flown in two heats and a final, is the Light Aeroplane Holiday Handicap (International) and is open to single-seaters and two-seaters whose engine weight does not exceed 170 lb. The race is over a distance of 50 miles (four laps to the course). First Prize is one of £100, and a special Prize of £25 will be awarded by the Royal Aero Club to the winner of each heat. The first three in each heat will be eligible to compete in the final.

Event No. 2 will be a scratch speed race (International), for two-seater light 'planes, whose engine weight does not exceed 170 lb. The race is over a distance of 50 miles (four laps of the course), and is timed to start at 3.30 p.m. The First Prize is one of £50.

Event No. 3 is a scratch speed race (International) for single-seater light 'planes, and is open to machines whose



SPEED-TIME CHART FOR THE LYMPNE COURSE : By means of this chart, visitors to Lympne will be able to ascertain at a glance the approximate speed of competitors over the course. Each of the small divisions represents three seconds, so that if a given machine takes 9m. 33s. to cover one lap, its speed over the course is 78.5 m.p.h.

engine weight does not exceed 120 lb. The race is over a distance of 50 miles (four laps of the course), and the First Prize is one of £50, with a Second Prize of £20. As these two events are scratch speed races, the machines in each event will start together. This race is timed to start at 4.45 p.m.

At the end of Event No. 3 there will be demonstrations of parachute descents with Calthrop parachutes (*Event No. 4*), and exhibition flying by Capt. F. T. Courtney, on an Armstrong Whitworth "Siskin" fitted with 395 h.p. Armstrong Siddeley "Jaguar" engine. (*Event No. 5*.)

SUNDAY, AUGUST 2

On Sunday, August 2, there will be no actual races, but the day will be mainly devoted to establishing certified performances for light 'planes, both single-seaters and two-seaters. To be eligible for this event (*No. 6*) the weight of the engine must not exceed 170 lb. The Royal Aero Club will give certificates for performance in the following classes:—Class I.—Height in a given time (30 minutes). Class II.—Greatest speed over three kilometres. Class III.—Greatest speed over 50 kilometres. Class IV.—Height.

A prize of £25 will be given for the best performance in each class. During the day there will be parachute descents, and also exhibition flights by Captain F. T. Courtney, and probably there will be additional events, which will be notified on the Events Board on the Aerodrome.

MONDAY, AUGUST 3

The first event on August Bank Holiday will be an International Handicap open to all aeroplanes, irrespective of engine power. The race, which is over a distance of 100 miles (8 laps of the course), will be flown in two heats and a final,

the first three in each heat being eligible to compete in the final. A First Prize of £150 is awarded for this event, with a Second Prize of £50. The Royal Aero Club will award a Special Prize of £25 to the winner of each heat. The first heat will start at 10 a.m., the second at 12 o'clock noon, and the final at 2 p.m. As will be seen from the list of entries, a large number of machines will be taking part in this event (*No. 9*).

The Grosvenor Challenge Cup Handicap

This event (*No. 10*), which is scheduled to start at 4 p.m. on August Bank Holiday, is for British machines and pilots only, and is limited to machines whose engine weight does not exceed 275 lb. The race is over a distance of 100 miles (8 laps of the course), and there is a First Prize of £100 and a Second Prize of £50. It will be seen that all the machines eligible under the rules have been entered for this race, so that altogether it may be expected that this year's August Bank Holiday will provide some of the best air racing seen in this country for many years. Last year the Grosvenor Challenge Cup was won by Mr. Bert Hinkler on an Avro "Avis." In this year's Grosvenor Cup Race, Mr. Hinkler is flying the same machine.

Private Owners' Handicap (International)

The final race on August Bank Holiday will be for privately-owned aeroplanes. The engine weight is not limited in this race, and it will be seen that a good number of entries have been received. The race is over a distance of 50 miles (4 laps of the course), and the First Prize is £100. This event is timed to start at 6 p.m. If time permits, this race will be followed by exhibition flying by Courtney, and by parachute descents.

THE MACHINES

ALTHOUGH it is perfectly true to say that the Royal Aero Club's August meeting has not attracted any new machines, and that many of those entered to take part might be described as "dug-outs," the meeting has, at any rate, brought together a large number of machines, as such things go in England, and the very fact that some of the machines entered are old-timers is not a drawback. On the contrary, it will be extremely interesting to compare the performances of the machines built shortly after the war with those of some of the very latest, and if we have made any progress in aerodynamic design during the past four or five years the fact should be proved at the Lympne races. Photographs of most of the competing machines will be found on pp. 481 and 482, and in the following notes it is proposed to indicate briefly the main features of each machine for the benefit of those of our readers who may not off-hand remember the history of each type. Space does not permit of a lengthy description, but it is thought that the following brief notes may help to refresh the memory of those who have somewhat lost close touch with aeroplane construction during the last few years. Reference will be made first to the larger machines, and this will be followed by reference to light 'planes, or to such machines as, although not strictly speaking being light 'planes, can, at any rate, be classed as low-power aeroplanes.

Airdisco-Avro

The Airdisco-Avro which will take part in the Lympne races is, to all intents and purposes, a standard Avro 504, but in place of the rotary engine usually fitted, the power plant is an Airdisco air-cooled V-type of 120 h.p. This engine was developed from the 90 h.p. R.A.F. engine by Major Halford, who also designed the "Cirrus" engine with which the De Havilland "Moths" are fitted. The Airdisco-Avro has been entered by Capt. Chas. B. Wilson, M.C., and will be piloted by Mr. B. Youell. The machine has been entered for the International Handicap.

Avro "Lynx"

Originally designed in 1912, the Avro 504 has probably had a longer life, as a type, than any other machine in the world. It is a very popular training machine and has been fitted with a great variety of engines, both rotaries, radials and water-cooled. The machine entered for the Lympne meeting is fitted with an Armstrong-Siddeley "Lynx" of 180 h.p., and will be piloted by Mr. Bert Hinkler. Like the Airdisco-Avro, the Avro "Lynx" has been entered for the International Handicap.

The B.E. 2E

The B.E. 2E was designed during the war by the Royal Aircraft Establishment, or, as it then was, the Royal Aircraft

Factory, at Farnborough. The B.E. 2E was one of the last developments of the original B.E., for the design of which Capt. de Havilland was responsible. The most popular of the B.E. types was, perhaps, the B.E. 2C, which was a remarkably stable machine and could be flown "hands-off" for long periods. Incidentally the letters B.E. were used to indicate British Experimental. The B.E. 2E differs from the B.E. 2C in having a large overhang to the top plane. The engine is a 90 h.p. R.A.F., i.e., the type from which Mr. Halford developed the "Airdisco" engine. The machine will take part in the International Handicap, and also in the Private Owners' Handicap.

The Bristol Machines

Two "large" Bristol aeroplanes will take part in the Lympne competitions. One of these is the Bristol "Bloodhound," fitted with 400 h.p. Bristol "Jupiter" engine, and the other is the Bristol School machine, with 120 h.p. Bristol "Lucifer." The Bristol "Bloodhound" is the same machine as that entered for the King's Cup, and is, incidentally, the most powerful machine taking part in the competitions at Lympne. It is an all-metal biplane designed as a two-seater fighter, but for racing purposes certain minor alterations have been made, such as the suppression of the gun-ring, etc. The machine has been entered by Sir Henry White Smith, C.B.E., Director and Secretary of the Bristol Aeroplane Company, and will be piloted by Mr. T. W. Campbell, the well-known Bristol pilot.

The Bristol school machine is a small two-seater biplane, which has been in use for the past two years at the Bristol Flying School at Filton, where it has done some extremely good work. In the competition it will be fitted with a new series IV "Lucifer" engine, which develops 120 h.p. In this connection it may be mentioned that during the two years in which the "Lucifer" has been used at the Bristol Flying School there has not been a single forced landing due to engine failure, a fact which bears testimony to the reliability of the Bristol "Lucifer." The machine has been entered by Mr. Herbert J. Thomas, Works Manager of the Bristol Aeroplane Company, for the International Handicap, in which it will be piloted by Mr. C. T. Holmes.

The D.H. 37

This machine was designed and constructed by the De Havilland Aircraft Company some years ago for Mr. Alan S. Butler, who is Chairman of the board of directors of the De Havilland Aircraft Company. Mr. Butler wanted a machine upon which he could go touring over considerable distances, accompanied, if desired, by a passenger, and carrying a fair amount of personal luggage. The D.H.37 was, therefore, designed with this object in view, and has

LYMPNE ENTRIES

LIGHT AEROPLANE HOLIDAY HANDICAP (INTERNATIONAL)

Ident'n Letters	Machine and Engine	First Heat	Entrant	Pilot
G-EBKP	Avro "Avis," B.Ch.	A. V. Roe and Co.	Bert Hinkler.	
G-EBJJ	Beardmore "Wee Bee I," B.Ch.	Lord Invernairn	A. N. Kingwill.	
G-EBHZ	D.H.53, A.B.C.	Lord E. A. Grosvenor	*	
G-EAPF	Austin "Whippet," A.	Flt.-Lt. F. O. Soden	Flt.-Lt. F. O. Soden.	
G-EBMB	Hawker "Cygnets," B.A.	T. O. M. Sopwith, C.B.E., and F. Sigrist	Flt.-Lt. P. W. S. Bulman, M.C., A.F.C.	
G-EBHX	D.H.53, B.B.	Capt. G. de Havilland	Wing-Com. W. Sholto-Douglas, M.C., D.F.C.	
G-EBIL	A.N.E.C., B.A.	Major J. C. Savage	J. H. James.	

Second Heat

G-EBJM	Bristol "Brownie," B.Ch.	Sir G. Stanley White, Bart.	C. F. Uwins.
H-NACN	Pander monoplane, A.	Pander Aeroplane Works	Col. The Master of Sempill.
G-EBHS	R.A.E. Aeroplane Club "Hurricane," B.Ch.	R.A.E. Aero Club, Farnborough	Flt.-Lt. J. S. Chick.
	C.L.A.3, B.Ch.	Cranwell Light Aeroplane Club	Flt.-Lt. N. Comper.
G-EBKM	Parnall "Pixie II," B.	George G. Parnall	F. T. Courtney.
G-EBKK	Parnall "Pixie III," B.Ch.	George G. Parnall	Sq.-Ldr. R. A. de H. Haig.
G-EBJU	Short "Satellite," B.Ch.	H. O. Short	J. Lankester Parker.

TWO-SEATER LIGHT AEROPLANE SCRATCH SPEED RACE (INTERNATIONAL)

G-EBJU	Short "Satellite," B.Ch.	H. O. Short	J. Lankester Parker.
G-EBJJ	Beardmore "Wee Bee I," B.Ch.	Lord Invernairn	A. N. Kingwill.
G-EBMB	Hawker "Cygnets," B.A.	T. O. M. Sopwith, C.B.E., and F. Sigrist	Flt.-Lt. P. W. S. Bulman, M.C., A.F.C.

SINGLE-SEATER LIGHT AEROPLANE SCRATCH SPEED RACE (INTERNATIONAL)

H-NACN	Pander monoplane, A.	Pander Aeroplane Works	Col. The Master of Sempill.
G-EBHZ	D.H.53, A.B.C.	Lord E. Grosvenor	*
G-EBHX	D.H.53, B.B.	Capt. G. de Havilland	Wing-Com. W. Sholto Douglas, M.C., D.F.C.
G-EBHS	R.A.E. Aero Club "Hurricane," B.Ch.	R.A.E. Aero Club, Farnborough	Flt.-Lt. J. S. Chick.
	C.L.A.3 monoplane, B.Ch.	Cranwell Light Aeroplane Club	Flt.-Lt. N. Comper.
G-EBKM	Parnall "Pixie II," B.	George G. Parnall	Frank T. Courtney.
G-EBIL	A.N.E.C. monoplane, B.A.	Maj. J. C. Savage	J. H. James.

CERTIFIED PERFORMANCES FOR LIGHT AEROPLANES

G-EBJM	Bristol "Brownie," B.Ch.	Sir G. Stanley White, Bart.	C. F. Uwins.
G-EBJJ	Beardmore "Wee Bee I," B.Ch.	Lord Invernairn	A. N. Kingwill.
H-NACN	Pander monoplane, A.	Pander Aeroplane Works	Col. The Master of Sempill.
G-EBHZ	D.H.53, A.B.C.	Lord E. Grosvenor	*
G-EBJU	Short "Satellite," B.Ch.	H. O. Short	J. Lankester Parker.
G-EAPF	Austin "Whippet," 45 A.	Flt.-Lt. F. O. Soden	Flt.-Lt. F. O. Soden.
G-EBMB	Hawker "Cygnets," B.A.	T. O. M. Sopwith, C.B.E., and F. Sigrist	Flt.-Lt. Bulman, M.C., A.F.C.
G-EBKM	Parnall "Pixie II," B.	George G. Parnall	Frank T. Courtney.
G-EBKK	Parnall "Pixie III," B.Ch.	George G. Parnall	Sq.-Ldr. R. A. de H. Haig.
G-EBIL	A.N.E.C., B.A.	Major J. C. Savage	J. H. James.

INTERNATIONAL HANDICAP

First Heat

G-EBGE	Bristol "Lucifer," B.L.	Herbert J. Thomas	C. T. Holmes.
G-EBGG	Bristol "Bloodhound," B.J.	Sir Henry White Smith, C.B.E.	T. W. Campbell.
G-EBKQ	Avro-Lynx, A.S.L.	A. V. Roe and Co.	Bert Hinkler.
G-EBJU	Short "Satellite," B.Ch.	H. O. Short	J. Lankester Parker.
G-EBHZ	D.H. 53, A.B.C.	Lord E. Grosvenor	*
G-EANW	B.E. 2E.90, R.A.F.	R. L. Preston	Not announced.
G-EADB	Sopwith "Gnu," 110 le Rhone	J. R. King	J. R. King.
G-EAPF	Austin "Whippet," 45 A.	Flt.-Lt. F. O. Soden	Flt.-Lt. F. O. Soden.
G-EBMB	Hawker "Cygnets," B.A.	T. O. M. Sopwith, C.B.E., and F. Sigrist	Flt.-Lt. P. W. S. Bulman, M.C., A.F.C.
G-EBDK	Martinsyde F.6, 180 W.V.	Leslie Hamilton	Leslie Hamilton.
G-EBHS	R.A.E. Aero Club "Hurricane," B.Ch.	R.A.E. Aero Club, Farnborough	Flt.-Lt. J. S. Chick.

Second Heat

G-EBJM	Bristol "Brownie," B.Ch.	Sir G. Stanley White, Bart.	C. F. Uwins.
G-EBJJ	Beardmore "Wee Bee I," B.Ch.	Lord Invernairn	A. N. Kingwill.
G-EBHX	D.H. 53, B.B.	Wing-Com. W. Sholto Douglas, M.C., D.F.C.	Wing-Com. Sholto Douglas.
G-EACZ	Sopwith "Scooter," Cl.	Cecil Clayton	J. P. C. Phillips.
	C.L.A.3, B.Ch.	Cranwell Light Aeroplane Club	Flt.-Lt. N. Comper.
G-EBHK	Airdisco-Avro, 120 Adc.	Capt. C. B. Wilson, M.C.	B. Youell.
G-EBIL	A.N.E.C., B.A.	Maj. J. C. Savage	J. H. James.
G-EBKM	Parnall "Pixie II," B.	George G. Parnall	Frank T. Courtney.
G-EBKK	Parnall "Pixie III," B.Ch.	George G. Parnall	Sq.-Ldr. R. A. de H. Haig.
G-EBKU	D.H. 60 "Moth," 60 C.	Capt. G. de Havilland	Capt. H. S. Broad.
G-EBKT	D.H. 60 "Moth," 60 C.	Sir Charles C. Wakefield, Bart.	Alan J. Cobham.
H-NACN	Pander mono. 30 A.	Pander Aeroplane Works	Col. The Master of Sempill.

GROSVENOR CHALLENGE CUP HANDICAP

G-EBJM	Bristol "Brownie," B.Ch.	Sir G. Stanley White, Bart.	C. F. Uwins.
G-EBKP	Avro "Avis," B.Ch.	A. V. Roe	Bert Hinkler.
G-EBJJ	Beardmore "Wee Bee I," B.Ch.	Lord Invernairn	A. N. Kingwill.
G-EBHZ	D.H.53, A.B.C.	Lord E. Grosvenor	*
G-EBMB	Hawker "Cygnets," B.A.	T. O. M. Sopwith, C.B.E., and F. Sigrist	Flt.-Lt. P. W. S. Bulman, M.C., A.F.C.
G-EBHX	D.H.53, B.B.	Wing-Com. Sholto Douglas	Wing-Com. Sholto Douglas.
G-EBHS	R.A.E. Aero Club, "Hurricane," B.Ch.	P. N. G. Peters	Flt.-Lt. J. S. Chick.
G-EBJU	Short "Satellite," B.Ch.	H. O. Short	J. Lankester Parker.
	C.L.A.3, B.Ch.	Sq.-Ldr. W. Thomas, M.C.	Flt.-Lt. N. Comper.
G-EBKM	Parnall "Pixie II," B.	George G. Parnall	Frank T. Courtney.
G-EBKK	Parnall "Pixie III," B.Ch.	George G. Parnall	Sq.-Ldr. R. A. de H. Haig.
G-EBIL	A.N.E.C., B.A.	Maj. J. C. Savage	J. H. James.
G-EBKU	D.H.60 "Moth," 60 C.	Capt. G. de Havilland	Col. The Master of Sempill.
G-EBKT	D.H.60 "Moth," 60 C.	Sir Charles C. Wakefield, Bart.	Alan J. Cobham.

PRIVATE OWNERS' HANDICAP (INTERNATIONAL)

G-EBHZ	D.H.53, A.B.C.	Seven Light Aeroplane Club, Eastchurch	*
G-EANW	B.E. 2E.90, R.A.F.	R. L. Preston	Not announced.
G-EADB	Sopwith "Gnu," 110 le R.	J. R. King	J. R. King.
G-EAPF	Austin "Whippet," 45 A.	Flt.-Lt. F. O. Soden	Flt.-Lt. F. O. Soden.
G-EBDK	Martinsyde F.6, 180 W.V.	Leslie Hamilton	Leslie Hamilton.
G-EACZ	Sopwith "Scooter," C.	Cecil Clayton	J. P. C. Phillips.
	C.L.A.3, B.Ch.	Cranwell Light Aeroplane Club	Flt.-Lt. N. Comper.
G-EBKA	S.E.5, 80 Renault	Dr. E. D. Whitehead Reid	Dr. E. D. Whitehead Reid.
G-EBHS	R.A.E. Aero Club, "Hurricane," B.Ch.	R.A.E. Aero Club, Farnborough	Flt.-Lt. J. S. Chick.

ABBREVIATIONS: A = Anzani; A.B.C. = A.B.C. "Scorpion"; Adc. = Airdisco; A.S.L. = Armstrong-Siddeley "Lynx"; B = Blackburne; B.A. = British Anzani; B.B. = Blackburne "Badger"; B.Ch. = Bristol "Cherub"; B.J. = Bristol "Jupiter"; B.L. = Bristol "Lucifer"; C = "Cirrus"; Cl. = Clerget; W.V. = Wolsley "Viper."

* The pilots entered for this machine are: Flying Officer C. E. F. Boyes, or Flight-Lieut. A. P. Ritchie, or Flight-Lieut. A. L. A. Perry-Keene.

been used by Mr. Butler upon very extensive tours, some of which have taken him all round Europe—as far south as Italy, and as far east as Czecho-Slovakia. In addition to its use as a touring machine, "Sylvia," as the machine is christened, has taken part in a great number of races and has always acquitted itself well. The machine is of typical De Havilland appearance, and is fitted with 275 h.p. Rolls-Royce "Falcon" engine. In the Lympe meeting the D.H.37 will take part in the International Handicap and in the Private Owners' Handicap, and will be piloted by Major H. Hemming, A.F.C. (Just as we go to press it is learned that this machine has been scratched.)

Martinsyde F.6

Generally speaking the Martinsyde F.6 is very similar to the famous Martinsyde F.4, but is fitted with a Wolseley "Viper" engine of 180 h.p. A machine of this type was used very extensively some years ago by Mr. F. P. Raynham, who took part in several races with it. The machine which will be competing at Lympe has been entered and will be piloted by Mr. Leslie Hamilton. As the Martinsyde Company has now been taken over by the Aircraft Disposal Company, that firm now holds the manufacturing rights. The Martinsyde F.6 has been entered for the International Handicap and the Private Owners' Handicap.

The S.E.5

Another machine designed by the Royal Aircraft Factory at Farnborough is the S.E.5, which was used in large numbers as a single-seater fighter during the war. As a fighter the S.E.5 was fitted with Wolseley or Hispano engines, but the example competing at Lympe, which is the property of and will be piloted by Dr. E. D. Whitehead Reid, has been fitted with an 80 h.p. Renault, and even with this low power it is still a very useful sporting and touring aeroplane.

THE LIGHT 'PLANES

Lack of space entirely precludes the possibility of giving a detailed description of the light 'planes entered for the Lympe races, nor is a detailed description required, as almost without exception all the competing machines were described in our issue of September 25, 1924, on the occasion of last year's Lympe competitions. In the following notes we give but the briefest reference to each type by way of assisting our readers in remembering the various machines.

A.N.E.C. Monoplane.

This is, we believe, the 1923 Lympe single-seater A.N.E.C. monoplane, but with smaller wings. The machine was designed by Mr. W. S. Shackleton and built by the Air Navigation & Engineering Company, of Addlestone. It has been entered by Major J. C. Savage, of sky-writing fame, and will be piloted by Mr. J. H. James, the famous racing pilot. The engine is a British Anzani.

Austin "Whippet."

This machine was designed for the Olympia Aero Show of 1919 by Mr. John Kenworthy, and several specimens of it were built by the aircraft section of the Austin Motor Company. The one taking part in the Lympe races is owned and will be piloted by Flight-Lieut. F. O. Soden, who has been using it for several years as a touring machine.

Avro "Avis."

The Avro "Avis" was designed for last year's Lympe competitions, but on that occasion was prevented by engine trouble from showing what it could really do. It is a single-bay, I-strut biplane with folding wings, and the engine is a Bristol "Cherub." It will be piloted in the races by Mr. Bert Hinkler, the famous Avro test pilot.

Beardmore "Wee Bee I."

The Beardmore "Wee Bee I" is the machine which won first prize in last year's Lympe competitions. It was the first machine designed by Mr. W. S. Shackleton when he joined Beardmore's as Chief Designer, and is characterised by particularly "clean" lines. It will be piloted at Lympe by Mr. A. N. Kingwill. The engine is a Bristol "Cherub."

Bristol "Brownie."

The Bristol "Brownie" light monoplane was designed by Capt. Frank Barnwell, and is of particular interest on account of its all-metal construction. A similar machine won second prize in last year's Lympe competitions. Again this year

Dr. Reid has been a frequent visitor to British air races during the past few years, and his appearance at Lympe this year will be generally welcomed. The S.E.5 has been entered for the Private Owners' Handicap.

The Sopwith Machines

The now defunct Sopwith Aviation Company was one of the pioneer firms of the British aircraft industry, and it is, therefore, gratifying to find that two of its machines will take part in the Lympe races. Both of these are of post-war design, but are, nevertheless, several years old, as both were produced during 1919. The Sopwith "Gnu" is a two-seater tractor biplane, fitted with 110 h.p. le Rhone engine. It has been produced in several slightly different forms, and in one edition was a small cabin machine. The type was first seen in public at Hendon in 1919, on the occasion of the official welcome to the American aviators who had then just flown across the Atlantic. At this meeting the machine was flown by the late Mr. Hawker, who took up a number of passengers in it. The "Gnu" flying at Lympe has been entered, and will be flown by Mr. J. R. King, the races in which it will take part being the International Handicap and the Private Owners' Handicap.

The Sopwith "Scooter" was, if we remember rightly, largely built by the late Mr. H. G. Hawker in his spare time, and may be said to be composed essentially of a Sopwith "Camel" fuselage, upon which has been placed a parasol monoplane wing of a type not now often seen, i.e., with wire bracing instead of strut bracing. This machine also appeared at the Hendon meeting in 1919 and was used by the late Mr. Hawker for stunt flying, his half-rolls particularly being very impressive. In the hands of that clever pilot the machine was capable of every trick known to pilots. The Sopwith "Scooter" has been entered for the International Handicap by Mr. Cecil Clayton, and will be piloted by Mr. J. T. C. Phillips.

the "Brownie" will be piloted by Mr. C. F. Uwins, the famous Bristol test pilot. Needless to say, the engine is a Bristol "Cherub."

Cranwell C.L.A. 3.

This is a new machine; in fact, the only new machine to take part in the August races at Lympe. As it is described in detail elsewhere, we need do no more here than remark that just as we go to press news has been received that the machine has been tested at Cranwell, and has behaved very well indeed. The machine will be piloted by Flight-Lieut. N. Comper.

The D.H. "Moths."

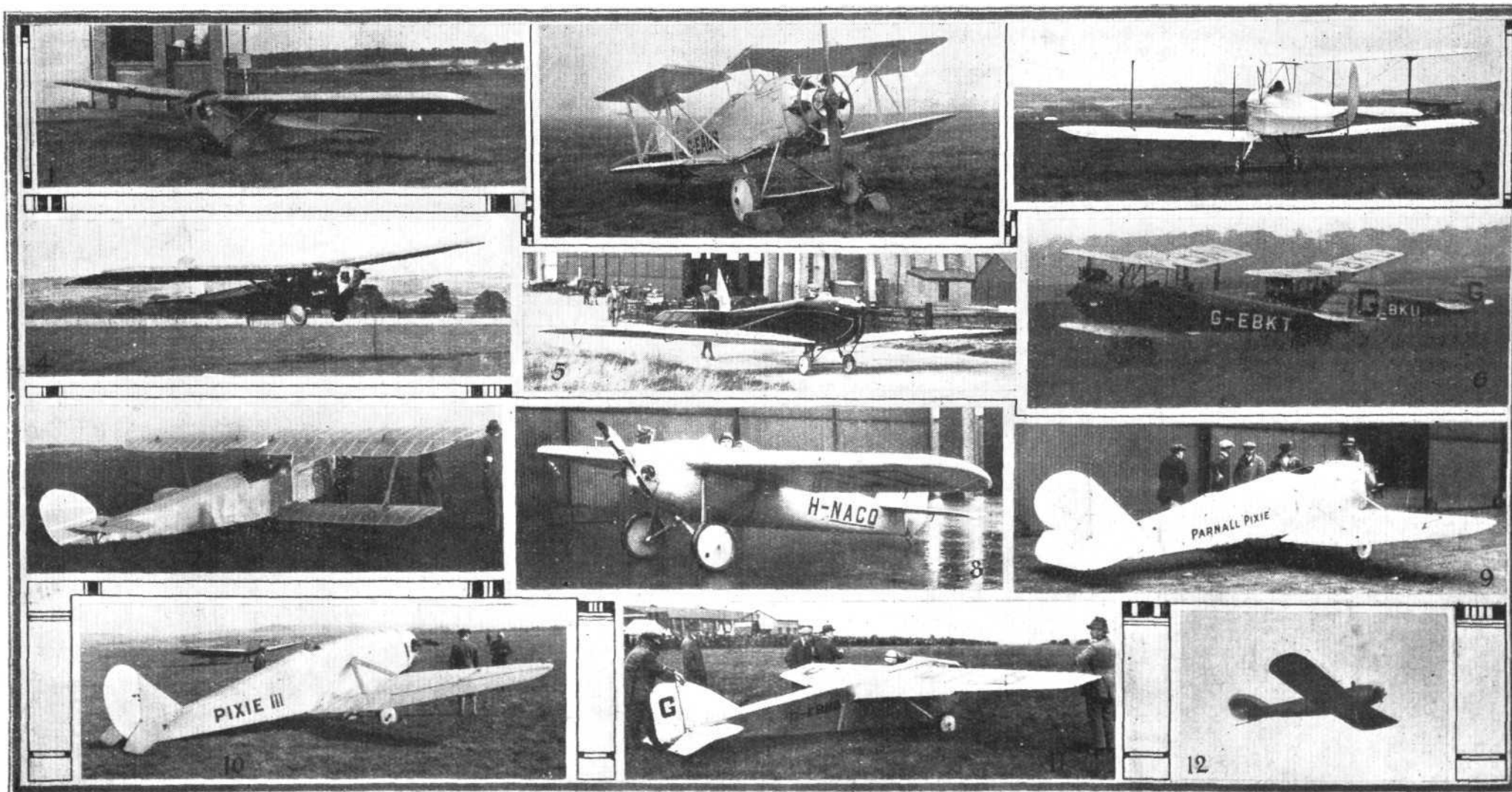
The D.H. "Moth," two of which will be taking part in the races, is of such recent date that there is little need to give detailed reference to it here. Suffice it to say, that it is the type adopted by the light 'plane clubs, and that it is fitted with a "Cirrus" engine of 65 h.p. One of the "Moths" will be piloted by Capt. H. S. Broad and the other by Mr. Alan J. Cobham.

D.H. 53.

The D.H. 53, of which also two specimens will be taking part, was designed for the 1923 Lympe competitions for single-seaters. Although the machine did not succeed in winning any prizes that year, it proved itself a thoroughly sound little machine and was built in several examples, partly for the Royal Air Force and partly for Australia. The machine has been fitted as standard with the Blackburne "Tomtit" engine, but the two examples flying at Lympe this week will be fitted with Blackburne "Badger" and A.B.C. "Scorpion" engines, respectively. The "Badger"-engine machine will be piloted by Wing-Commander W. Sholto Douglas, M.C., D.F.C., but at the moment it has not been definitely decided who will pilot the other.

Hawker "Cygnets."

Pursued by constant engine trouble during last year's Lympe competitions, the Hawker "Cygnets" never really got a chance to show what they could do, although Raynham came within an ace of disputing Piercey's claim to first place on the "Wee Bee I," engine trouble preventing him from completing the last lap. The machine entered for the August meeting is fitted with a British Anzani engine, and it is to be hoped that Flight-Lieutenant Bulman will have better luck with his engine this year than did Longton last year. The machine is an extremely neat biplane, and is remarkable for its extraordinarily low structure weight.



SOME LIGHT 'PLANES COMPETING AT LYMPNE: 1, the A.N.E.C. monoplane. Our photo shows the machine with standard wings. In the races it will, we believe, be fitted with wings of much shorter span. 2, the Austin "Whippet" with 45 h.p. Anzani. 3, the Avro "Avis" with Bristol "Cherub." 4, the Beardmore "Wee Bee I," with Bristol "Cherub." 5, the de Havilland D.H.53, one of which will have a Blackburne "Badger I" and the other an A.B.C. "Scorpion." 6, the two de Havilland "Moths," with 65 h.p. "Cirrus" engines. 7, the Hawker "Cygnet" with British Anzani engine. 8, the Pander monoplane with 30 h.p. French Anzani. 9, the Parnall "Pixie II" with Blackburne engine. 10, the Parnall "Pixie III" with Bristol "Cherub." 11, the R.A.E. Aero Club "Hurricane" with Bristol "Cherub," and 12, the all-metal Short "Satellite" with Bristol "Cherub."

The Pander Monoplane

In the absence of any German competitors the Pander monoplane is the only foreign machine taking part in the Lympne meeting, and it is therefore to be hoped that it will do well in the races. The machine has an excellent performance, as was demonstrated this spring when one was flown at Croydon by a number of pilots, and is extremely manoeuvrable. The fuselage is a *monocoque*, and the wings are of the pure cantilever type. The engine is a French Anzani 3-cyl. radial of 30 h.p. The Pander will be piloted in the races by Col. The Master of Sempill, who is a very experienced pilot, and who will be sure of getting the most out of his splendid little mount.

The Parnall Machines

Mr. George Parnall has entered two "Pixies" for the meeting, one being of the "Pixie II" type, which took part in the 1923 Lympne single seater light plane competitions, and the other the "Pixie III" built for last year's Lympne competition. Generally speaking, the machines are similar, both being low-wing braced monoplanes, but the "Pixie II" is a considerably smaller machine, especially in the matter of wing span, than the "Pixie III." The former, it may be recollected, made the fastest speed over the 1923 Lympne course (76.1 m.p.h.), and as this year's model is fitted with a Blackburne engine of 1,000 c.c. capacity it should be very

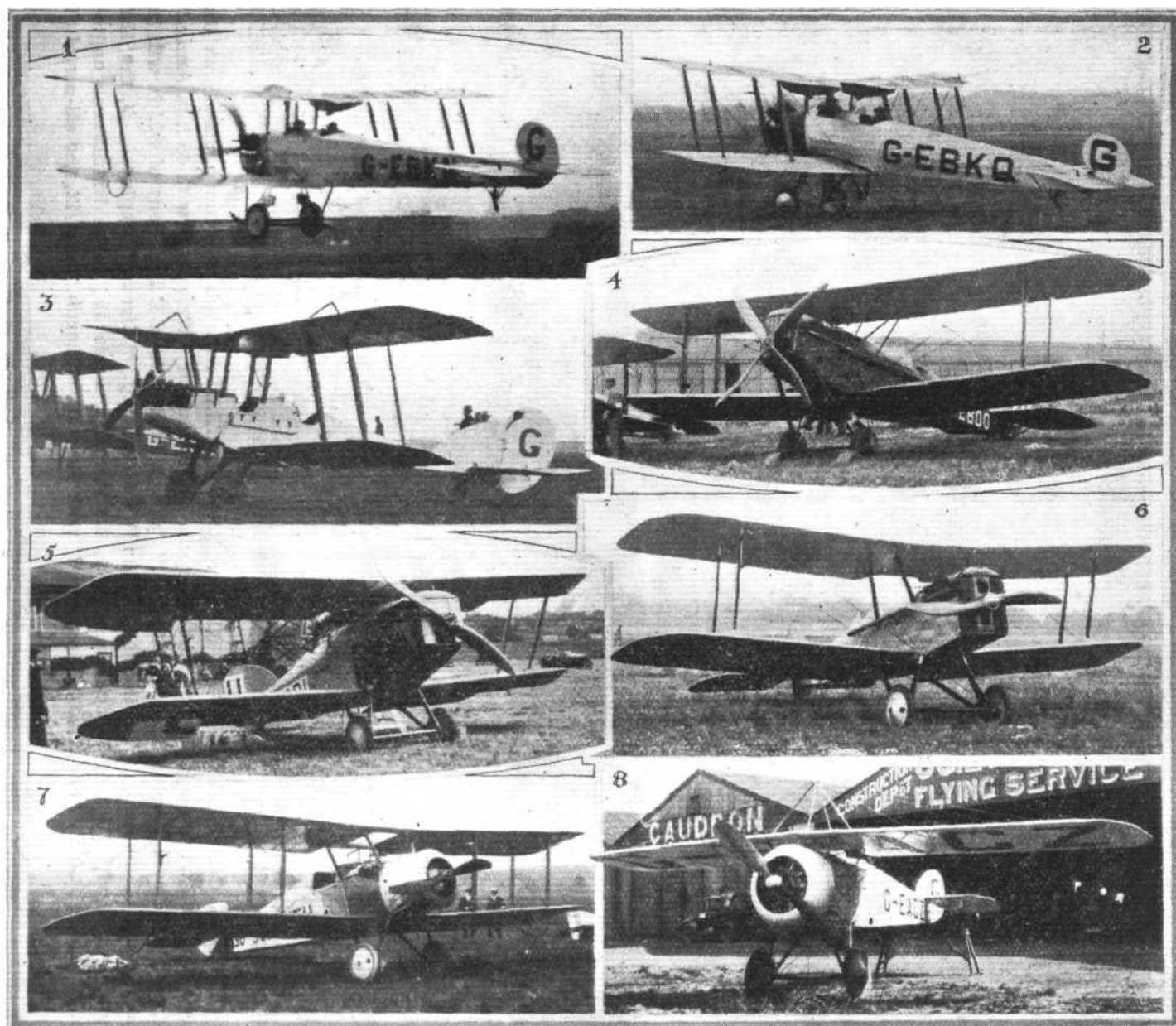
fast. It will be piloted by Mr. Frank Courtney, the famous test pilot. The "Pixie III," which is fitted with Bristol "Cherub" engine, will be piloted by Squadron-Leader Rollo A. de H. Haig. This machine, it may be pointed out, can be converted into a biplane by the addition of a top wing, and flew in this form in last year's Lympne competitions.

The "Hurricane"

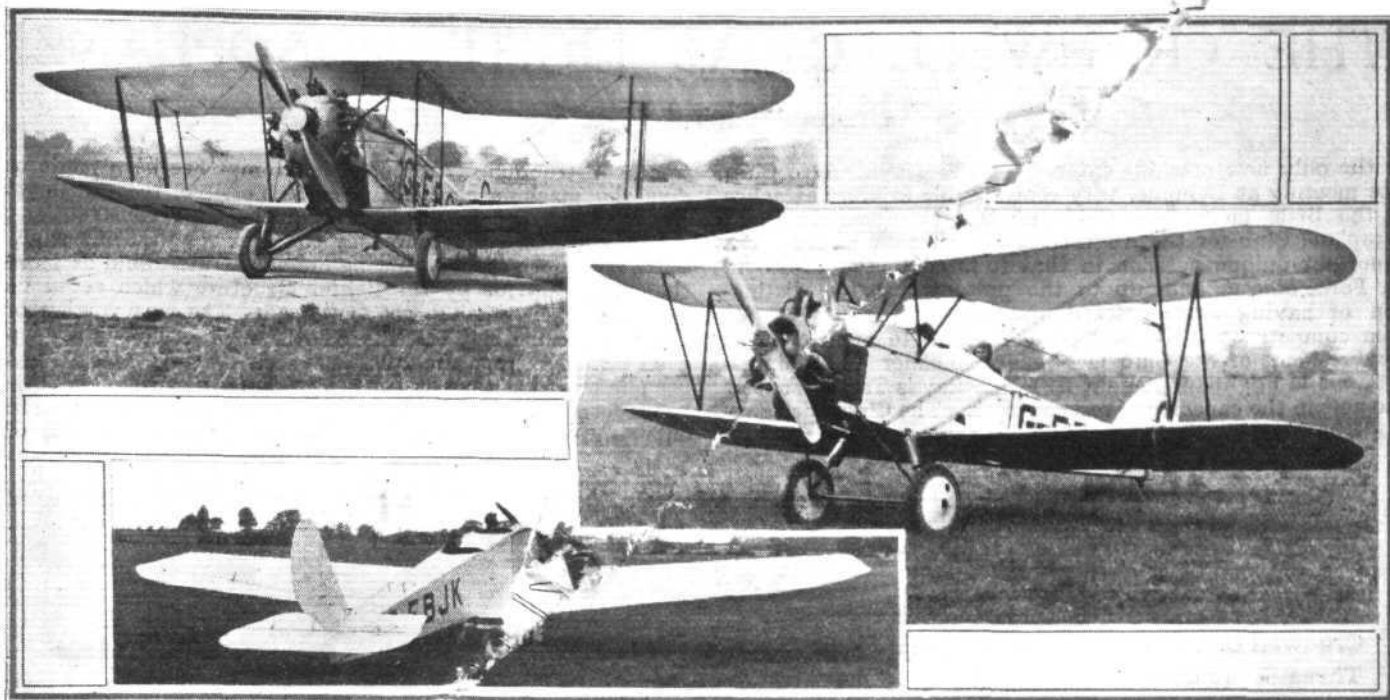
Originally designed and built for the 1923 single-seater light plane competition by members of the Royal Aircraft Establishment Aero Club of Farnborough, Hants, the "Hurricane" took part in the Grosvenor Cup race last October. It has a triangular section fuselage and cantilever wings, and is very fast indeed. Fitted as it is this year with a Bristol "Cherub" engine it should at last get a chance of showing what it can do. It will be piloted by Flight-Lieut. J. S. Chick, who is one of the Royal Aircraft Establishment's experimental test pilots.

The Short "Satellite"

A most remarkable machine in many ways is the little Short monoplane known as the "Satellite." Its fuselage, which is of perfect streamline form, is built entirely of metal, even to the covering, the actual material used being Duralumin sheet. This is a form of construction that has been developed



"LARGE" AEROPLANES TAKING PART IN THE LYMPNE MEETING: 1, the Airdisco-Avro, 120 h.p. Airdisco engine. 2, the Avro-Lynx, with 180 h.p. Armstrong-Siddeley "Lynx," 3, the B.E.2E, with 90 h.p. R.A.F. 4, the D.H.37, with 275 h.p. Rolls-Royce "Falcon." 5, the Martinsyde F.6 with 180 h.p. Wolseley "Viper." 6, the S.E.5. The machine shown has a Hispano engine but the one entered will have a 80 h.p. Renault. 7, the Sopwith "Gnu" with 110 h.p. 1e Rhone, and 8, the Sopwith "Scooter" with Clerget engine.



THREE BRISTOL MACHINES ENTERED FOR THE LYMPNE MEETING : In the top left-hand corner is shown the "Bloodhound," with 400 h.p. Bristol "Jupiter" engine. On the right the Bristol school machine with 120 h.p. Bristol "Lucifer," and below the Bristol "Brownie" light monoplane with Bristol "Cherub" engine.

during the last five or six years by Short Brothers, and which promises to become very successful. The "Satellite" is probably the smallest metal machine ever built, considering

that metal is used as the covering material. In general design the machine is of exceptionally clean lines, and with sufficient power it should have a very good turn of speed.

Lieut. Simonet Killed at Vauville

THE opening day of the French Light Plane and Glider meeting at Vauville, July 26, was marred by a fatal accident to the popular and well-known Belgian pilot, Lieut. Simonet, who, after being in the air for about six hours, crashed at Siouville and was killed.

Death of Mr. Dan Brostrom

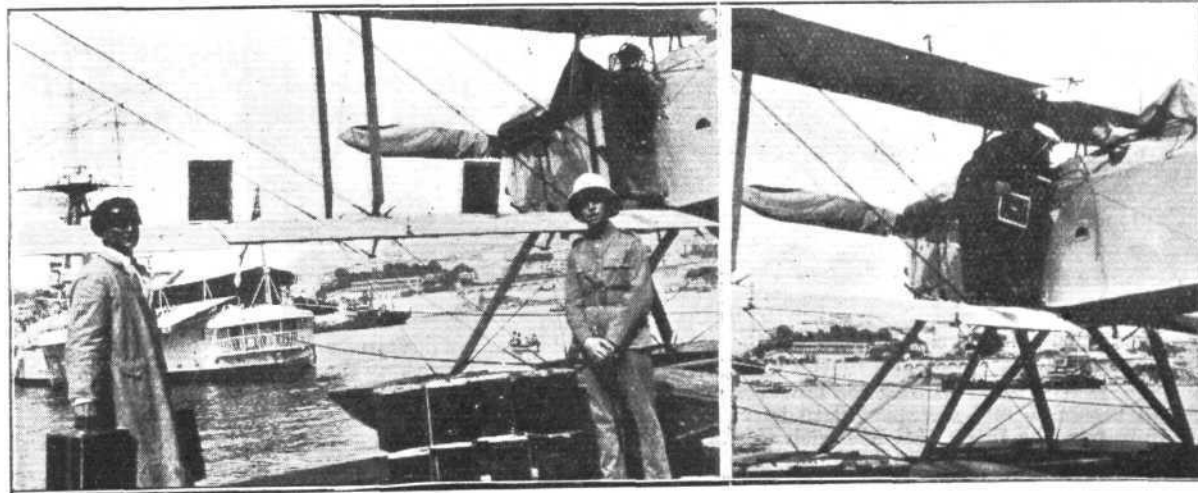
It is with extreme regret that we have to announce this week the death, as a result of a motor accident, of Mr. Dan Brostrom, the famous Swedish shipowner. Mr. Brostrom, who was probably the richest man in Sweden, proved a very charming host to the British aviation representatives at the Gothenburg Exhibition in 1923. With his death British aviation has lost a very great friend, and the sad news will be received with sincere regret by all who had the good fortune to meet Mr. Brostrom at Gothenburg.

Another Arctic Air Flight

CAPT. BRUNS, of the Norwegian Air Force, has arrived in Moscow with the object of submitting to a conference of experts a scheme for a scientific air expedition to the Arctic in 1927. This expedition will be led by Dr. Nansen, and it is proposed to employ an airship of 150,000 cub. m. capacity, with a lifting capacity of 55,000 kgs., plus a crew of fifty. The objects of the expedition will be to carry out investigations as to the possibility of establishing regular air communication between Europe and America via Siberia and Japan. The route will be from Mumansk and Franz-Josef Land, the North Pole, and Alaska or Anadyr and back.

Spanish Seaplanes at Gibraltar

On July 23, for the first time in the history of Gibraltar, a squadron of naval seaplanes from the Spanish aircraft carrier "Dedalo" carried out manœuvres over the Spanish section of the Bay of Gibraltar.



WITH THE MEDITERRANEAN FLEET AT GENOA : The above two photographs were taken on the occasion of the visit of the Mediterranean Squadron of the British Fleet to Genoa, and they depict one of the Fairey seaplanes, attached to the Fleet, taking in a supply of "Shell" Aviation Spirit.

THE CRANWELL C.L.A.3 LIGHT MONOPLANE

Bristol "Cherub" Engine

As the only new machine entered for the Royal Aero Club race meeting at Lympne, very considerable interest attaches to the little monoplane produced by the Cranwell Light Aeroplane Club for the August races. This club occupies a somewhat unique position in that it is composed of Royal Air Force officers, and, up to the present, has the distinction of having twice entered amateur-built machines for open competitions. It may be of interest to mention that the President of the Club is Squadron-Leader W. Thomas, M.C., while Flight-Lieutenant E. P. Mackay is Treasurer, and also acts in the capacity of reserve pilot. The Club's designer is Flight-Lieutenant N. Comper, who will also pilot the new

wood construction. Although an attempt has been made to give the machine as clean lines as possible, the cantilever principle has not been adopted for the wing construction; it probably being considered by the designer that any slight extra resistance caused by wing bracing struts would be more than made up for by the lighter structure which could be achieved when bracing was employed. The rear portion of the fuselage has flat sides and bottom, but there is a deep deck faring on top. In front, however, very great care has been taken to obtain as smooth a contour as possible, this being formed by light formers and stringers passing on the outside of the main fuselage structure, which in itself is of

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○ Cranwell C.L.A.3:
○ Three - quarter
○ front view. Note
○ the careful
○ streamlining of
○ the nose.
○
○
○
○ ○ ○ ○ ○ ○ ○ ○



machine in the Lympne races. It may be mentioned that Flight-Lieutenant G. T. H. Pack is in charge of wood construction, while engine installation, cowling, etc., is in the able hands of Flying-Officer F. H. Cashmore.

It may be recollected that in last year's Lympne competition the Cranwell Light Aeroplane Club was represented by a biplane, the C.L.A.2, with Bristol "Cherub" engine, which won the reliability prize of £300, with a total mileage of 762½, and a total number of hours flying of 17 hours 53 mins. 18 secs. The biplane was a somewhat slow machine, what with the side-by-side arrangement of pilot and passenger, and this great number of hours had to be put in in order to cover the mileage in the reliability trials. The Cranwell Club thoroughly well

considerably smaller cross-sectional area. Streamline form is maintained right up to the nose, a large beaten cowl surrounding the Bristol "Cherub" engine, of which only the cylinder heads project. The monoplane parasol wing is of constant chord but has the tips rounded off. The section used is known as Eiffel No. 371. This section has given very good results in model tests, but the full size performance of it is, we believe, somewhat of an untried quantity. This section is a fairly deep one, with flat bottom camber, but having a slight rise to the leading edge. The conventional undercarriage and normal tail planes complete the aerodynamic design, which altogether may be characterised as very clean, but by no means freakish.



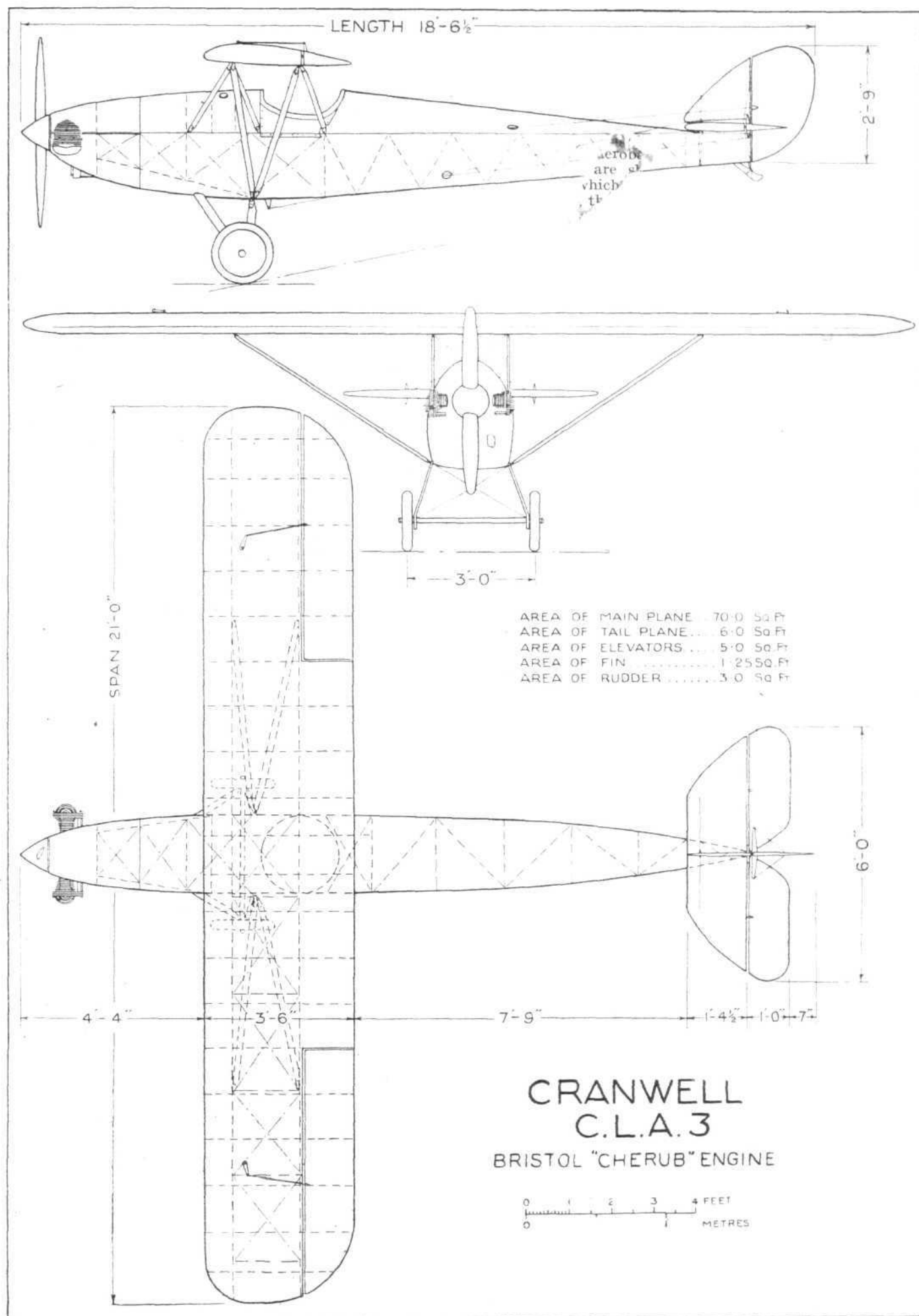
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○ The Cranwell
○ C.L.A.3: Three-
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deserved this encouragement, and everyone will be glad to learn that last year's success has induced the Club to have another try this year. The C.L.A.3 is, however, a very different kind of machine, and is expected to be one of the fastest for its power in the race. All will wish the Cranwell Club every success again this year, as theirs is a spirit much too rare in this country, where amateur designing and construction has never attained the popularity with which it is regarded abroad, particularly in Germany.

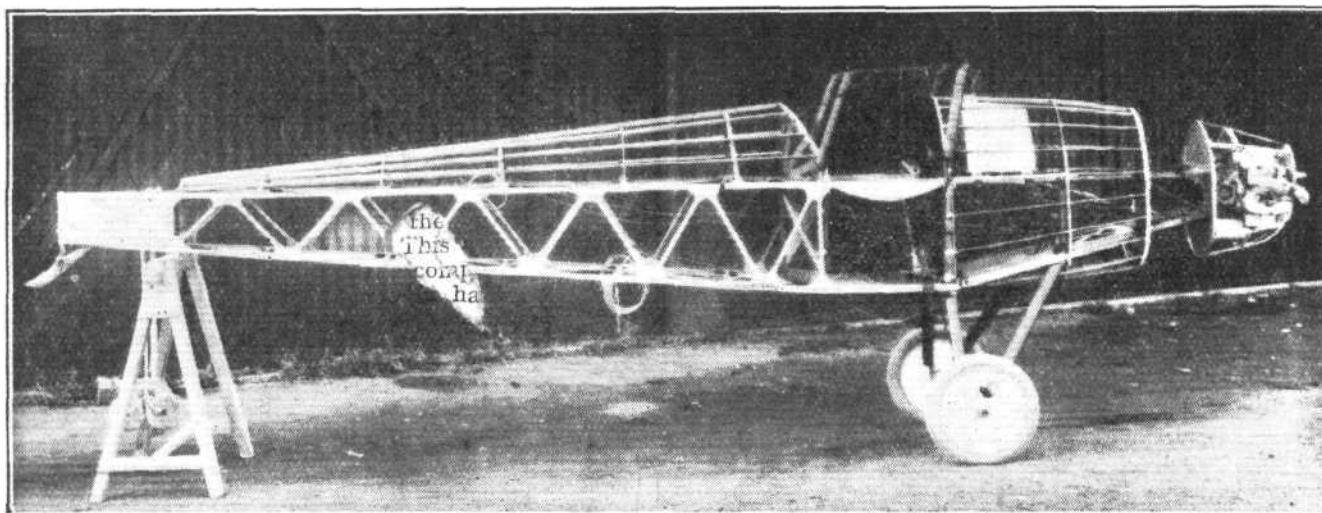
The Cranwell C.L.A.3, designed by Flight-Lieutenant Comper, A.F.R.Ae.S., is shown in the accompanying general arrangement drawings. It is a parasol monoplane of normal

Constructional features

Generally speaking the Cranwell C.L.A.3, is of fairly normal construction, and naturally forms have been chosen which lend themselves to amateur construction, the whole of the work of building the machine having been carried out by members of the Club, who, it must be admitted, have made a very creditable job of it. The rear portion of the fuselage is built up as a Warren girder comprising four longerons braced by diagonal struts so as to provide perfect triangulation. This form of construction extends from the stern post to the cockpit, but from here to the engine plate wire bracing has been employed. The struts in the triangulated portion of



THE CRANWELL C.L.A.3 MONOPLANE : General Arrangement Drawings, to scale.

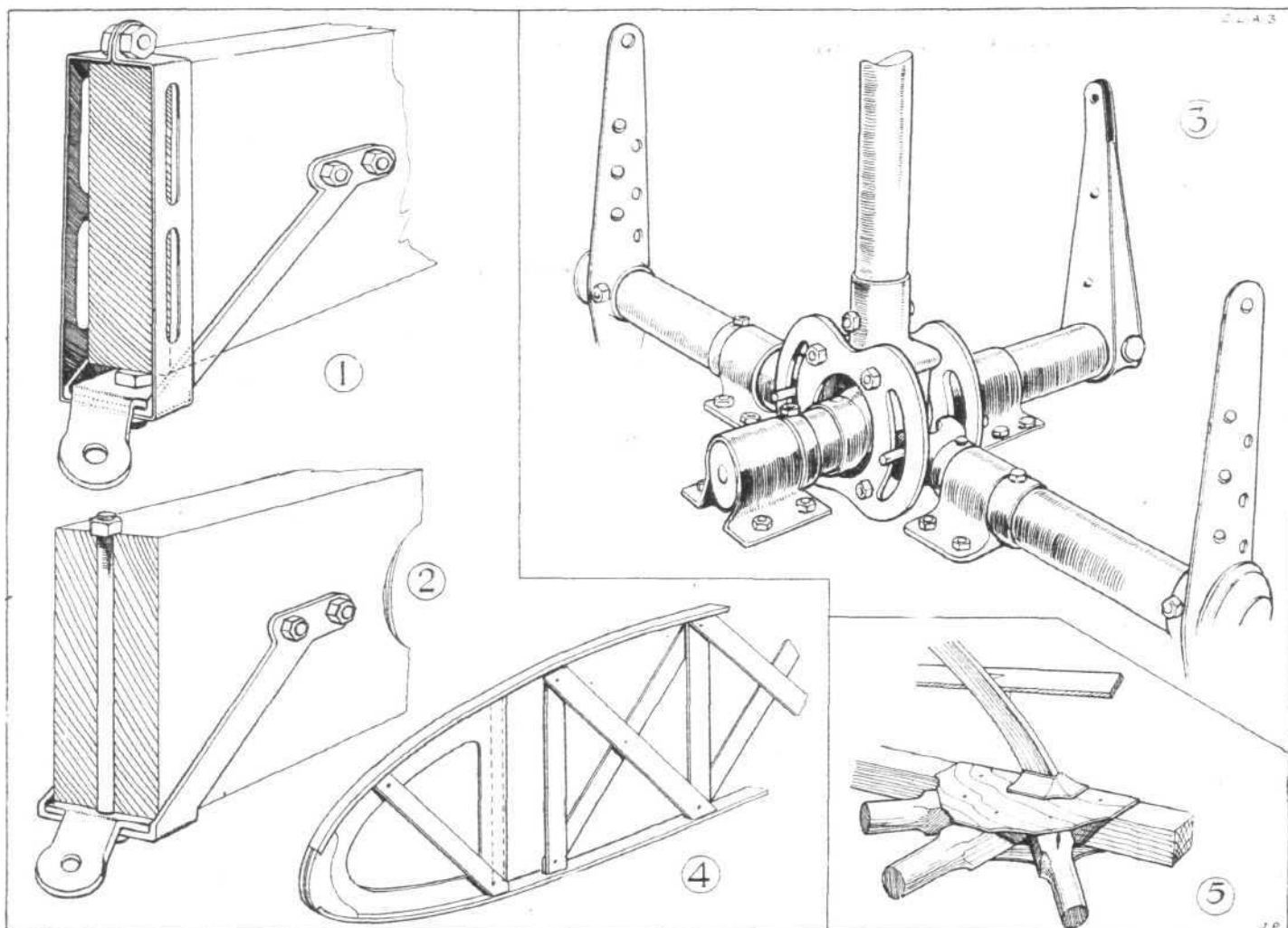


THE CRANWELL C.L.A.3 MONOPLANE: View of the fuselage, showing construction, undercarriage, engine mounting, etc.

the fuselage are of circular cross sections but terminate in square ends so as to facilitate attachment to the longerons, which attachment is in the form of three-ply gusset plates, as indicated in one of our sketches. The Bristol "Cherub" engine is mounted on overhung bearers, and, as already stated, the cowl surrounds the entire engine, with the exception of the cylinder heads. Attached to the engine plate, but extending right out to the cowl, is a fire-proof bulk-head. The petrol tank which has a capacity of $4\frac{1}{2}$ gals., is placed inside

the deck faring in front of the pilot, in which position there is a sufficient head of petrol to give direct gravity feed.

In order to keep down the cross-sectional area the pilot's cockpit has been kept down to the smallest possible proportions, and the pilot actually sits on the floor of the cockpit. This position has necessitated a somewhat unusual arrangement of the control stick, in the fittings of which universal joints have been incorporated. The actual arrangement is shown by a sketch which should explain the details.



SOME CONSTRUCTIONAL DETAILS OF THE CRANWELL C.L.A.3 LIGHT MONOPLANE: 1. Attachment of lift strut to front wing spar. A wood block filler between fitting and bottom of spar has been omitted so as to show the bolt. 2. The rear spar strut fitting has a bolt passing vertically through the spar. 3. The controls incorporate a universal joint of somewhat unusual design, necessitated by the fact that the pilot sits on the floor of the cockpit. 4. Shows the construction of a rib, while 5 is a typical fuselage joint. The joints in the top and bottom bays are staggered in relation to those in the side bays so as to allow the three-ply gussets to clear one another.

Access to the cockpit—and perhaps more particularly exit therefrom—appears to be none too easy, although a removable panel above the top longerons somewhat facilitates matters. The machine has, however, been designed for speed work, and, consequently, certain sacrifices in other respects must be made, and indeed are quite permissible in a racing machine even if objections might be made if the machine were intended for school work. From the plan view of the general arrangement drawings it will be seen that the monoplane wing does not taper. We believe that the designer would have preferred a tapered wing, but structural considerations led to the adoption of the parallel wing as being considerably easier to build. The spruce spars are both of I-Section, and the ribs are of simple lattice type. The covering is in the form of fabric, while the leading edge is aluminium. The wing is carried at the centre on four steel struts rising from the top longerons and is braced on each side by two steel tube struts. The method of attaching the wing-bracing struts to the wing spars is indicated by the sketches. In the case of the front spar the fitting is in the form of a strap surrounding the spar, but on the rear spar a vertical bolt passes through the spar from top to bottom. The ailerons have a differential movement somewhat after the style of that used in De Havilland machines. To cover up the gap between the main rear spar and aileron leading edge, rubber strips are employed as it is

expected that these will stop all air losses, at the same time allowing of free movement of the ailerons.

The tail planes are of normal design and construction and provision is made for varying the angle of incidence of the fixed tail plane. The adjustment, is, however, effected on the ground only and the tail plane is not of the trimming type.

The undercarriage is of orthodox design, with V-struts and rubber cord shock absorbers. The Cranwell C.L.A. 3 has been designed with high factors of safety, as it is hoped to obtain for it an aerobatic airworthiness certificate. The main dimensions are shown on the general arrangement drawings, from which it will be seen that the machine is quite a small one, the over-all length being only 18½ ft., while the wing span is but 21 ft. That very careful structural design has been incorporated will be realised when we point out that the weight of the machine empty is only 325 lbs., this figure, of course, including the weight of the "Cherub" engine. With a pilot weighing 170 lbs., and with 4½ gals. of petrol and a small quantity of oil, the total loaded weight is only 530 lbs., which, with a wing area of 70 sq. ft. gives a wing loading of 7.6 lbs./sq. ft. Assuming that the Bristol "Cherub" develops 30 b.h.p. the power loading is only 17.6 lb./h.p., so that with its clean aerodynamic design the C.L.A. 3 should have a very good turn of speed. The estimated top speed is, we believe, 100 m.p.h.

THE AIR MINISTER'S TASK

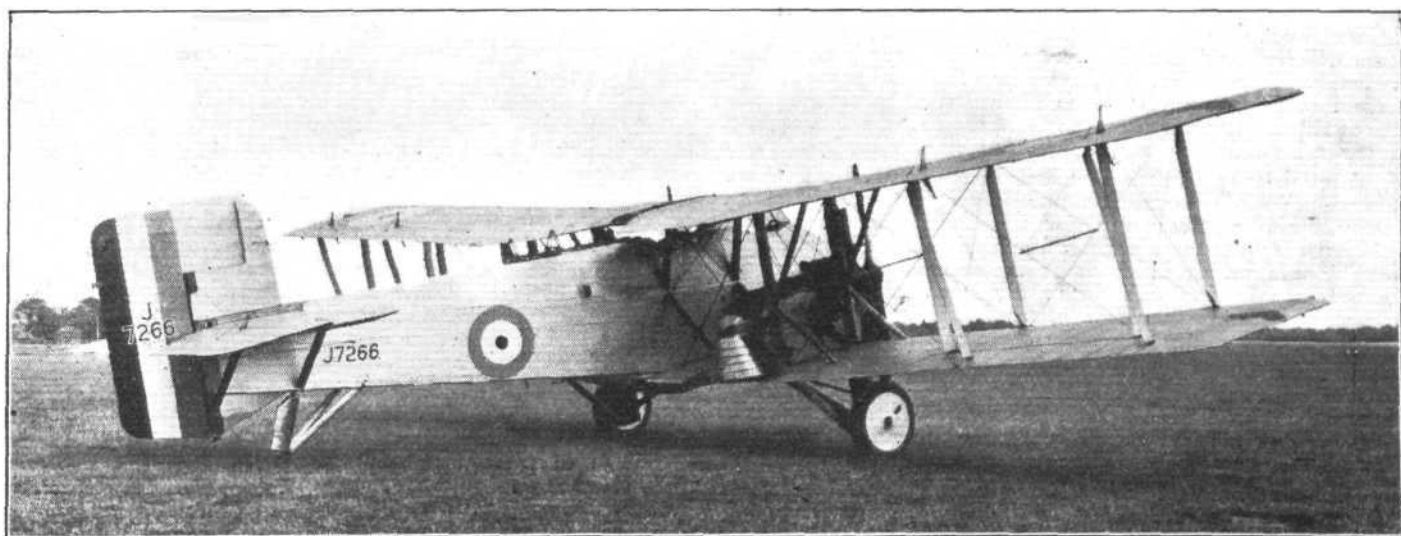
SPEAKING at Ampthill on July 25, Sir Samuel Hoare made an interesting statement regarding the task that lay before him as Secretary of State for Air—a task that was probably as difficult as any task that confronted a Minister.

He reminded his audience of the position in which he found the air defences when he first became Secretary of State for Air under Mr. Bonar Law's Government, and how, when he put the facts before the country the latter, irrespective of party, agreed to a programme trebling the strength of the Air Force over a period of five or six years. He wondered how many realised what a difficult problem this presented—finding the men, training the officers, equipping the stations and buildings, and last, but not least, finding the money at a time of great financial stringency? "Yet," said Sir Samuel, "you start building a station, and people hold up their hands in horror at money being spent upon bricks and mortar."

Referring to the Air Ministry's new home, Sir Samuel said that ever since he had been connected with the Air Ministry he had thought that the offices of the Department, which were City offices hired on a short tenancy, were uneconomical and inconvenient. Money could be saved and efficiency increased by developing a large tract of vacant Government property in Whitehall, and in the interests of

economy, of saving money, and avoiding waste, the Government has been considering the question. Yet, said Sir Samuel, he was held up by irresponsible critics as a spendthrift for even considering the project. In the first place, it was an expenditure concerning the Office of Works, not the Air Ministry, and, secondly, the sole object of the proposal was to avoid the present waste of money and of effort. They were attempting to treble the Force in five or six years at a cost of about 50 per cent. over and above what it was when the expansion scheme first began.

"In the meanwhile," continued Sir Samuel, "I shall take, as I have always taken, every opportunity to cut down unnecessary expenditure. It was because I wanted to cut down expenditure in the Middle East that I went off to Iraq in the spring. In Iraq, where the Air Command was introduced about three years ago, British expenditure upon defence has been reduced from 38½ millions to four millions, i.e., more than twice the whole amount of this year's Air Estimates, and I hope to make further reductions in the course of the next few months. It is for that reason, also, that I have been reviewing the establishment of the principal Air Force stations, and I hope that the result of these inquiries will be to effect a substantial reduction of expenditure in certain directions."



THE BOULTON AND PAUL "BUGLE" : This photograph shows the latest type of "Bugle" which is fitted with Napier "Lion" engines. In general the machine is similar to that described in *FLIGHT* some months ago with the exception of the change in the engines and their mounting. It may also be noticed that the petrol tanks have now disappeared from the top plane. They are now carried inside the fuselage. A further modification is that the elevators are balanced by horn balances. As the machine has been built by the Air Ministry no details as to performance may be given. The performances, however, are extremely good, as is also the manoeuvrability.

THE ROYAL AIR FORCE

London Gazette, July 17, 1925.

General Duties Branch

The following are granted short service commns. in ranks stated, with effect from, and with seniority of the dates indicated: *Flying Officers*.—(For seven years on the active list).—W. H. Burbury (Lieut., Indian Army, retd.), H. L. Drake (Lieut., Indian Army, retd.), M. C. Pascoe (Lieut., R.N., retd.), M. A. Platts (Lieut., Indian Army, retd.) (July 7). *Pilot Officers on Probation*.—(For five years on the active list).—W. S. Barnicott, P. E. Berryman, J. W. Busted, G. P. Butcher, H. A. S. Byrne, A. H. Campbell-Horsfall, E. H. Collinson, M.C. (Maj. E. Surrey Regt., R.A.R.O.), H. V. Crowder, F. G. H. Ewens, S. B. Flood, M. H. Frame, J. N. Goodwyn, J. A. Hawkings, L. M. S. Knight, C. A. C. Patton, E. C. L. Richardson, W. L. Robertson, W. J. M. Spaight, N. E. C. Squire, I. R. Sweeting, W. S. Townend, P. G. Tweedie, E. J. H. Wathen, R. C. Whittle (July 7); A. J. L. Hughes (July 13).

London Gazette, July 21, 1925

General Duties Branch

The following are granted short service commns. as Flying Officers, with effect from and with seny. of dates indicated:—T. B. Fenwick; July 9. A. S. M. Meyrick-Jones; July 14. The following Pilot Officers are promoted to the rank of Flying Officer:—J. A. Mollison; February 14. D. L. Thomson; Feb. 15. G. C. A. Armstrong, E. S. C. Davis, M. D. Ommanney, R. B. H. Jackson, H. M. Groves, J. H. Hutchinson; June 19. Pilot Officer J. L. F. Fuller-Good is promoted to rank of Flying Officer,

with effect from June 19 and with seny. of February 15. Pilot Officer H. R. F. Baxter is restored to full pay from half-pay; June 26. Pilot Officer A. H. Montgomery takes rank and seny. from May 14, and not as *Gazette* July 7. Sqdn.-Ldr. C. H. Hayward is placed on retired list at his own request; July 22. Pilot Officer R. C. L. Limbert resigns his short service commn.; July 23. Flying Officer H. Aldridge (Lieut. E. Surrey R.) relinquishes his temp. commn. on return to Army duty; July 7. Flying Officer R. W. H. Cook (Lieut., R.A.) relinquishes his temp. commn. on resigning his commn. in the Army; July 20.

Medical Branch

Flight-Lieut. E. N. H. Gray, D.P.H., is promoted to rank of Squadron-Leader; July 21. Flying Officer G. Clark, M.B., is transferred to Reserve, Class D.2; July 19.

Reserve of Air Force Officers

The following are granted commissions as Pilot Officers on probation General Duties Branch (July 21):—Class A.—L. O. Moss, M.M. Class B.—H. A. Record.

The following are confirmed in rank:—*Flying Officers*.—L. F. Ashley; June 30. B. P. B. Carter, D.F.C.; July 3. Lord E. A. Grosvenor; July 20. A. H. P. Pehrson; July 20. *Pilot Officers*.—E. H. Bird; June 16. W. R. W. Kelley; July 1. A. A. C. N. Smith; July 20. A. B. H. Youell; July 20.

Memorandum

The permission granted to Lieut. L. J. Llewelyn to retain his rank is withdrawn on his enlistment in the Army; June 30.

ROYAL AIR FORCE INTELLIGENCE

Appointments.—The following appointments in the Royal Air Force are notified:—

General Duties Branch

Squadron Leaders: J. A. G. De Courcy, M.C., to Inland Area Aircraft Depot, Henlow, 20.7.25. A. H. Measures, O.B.E., to Sch. of Tech. Training (Men), Manston, 27.7.25. R. H. Kershaw, to H.Q., Inland Area, 10.8.25.

Flight Lieutenants: E. W. Broadberry, M.C., to R.A.F. Depot, on transfer to Home Estab., 20.7.25. E. F. Waring, D.F.C., to R.A.F. Base, Calshot, 23.7.25.

Flying Officers: E. S. Burns, to No. 405 Flight, Leuchars, on transfer to Home Estab.; 12.6.25. D. S. Brookes to remain at No. 16 Sqdn., Old Sarum, instead of to No. 4 Sqdn. as previously notified. R. Barrett to No. 6 Sqdn., Iraq; 21.6.25. H. D. Mitchemore to No. 70 Sqdn., Iraq; 21.6.25. W. H. Burbury, H. L. Drake, M. C. Pascoe, and M. A. Platts, to R. A. F. Depot on appointment to Short Service Commns.; 7.7.25. C. S. Whellock, to No. 2 Armoured Car Co., Palestine; 24.6.25. A. S. M. Meyrick-Jones, to R.A.F. Depot, on appointment to a Short Service Commn.; 14.7.25. H. V. David, to H.Q., Iraq; 1.7.25. A. Malone, to R.A.F. Depot, on transfer to Home Estab.; 26.6.25. R. A. King, to No. 47 Sqdn., Egypt; 21.6.25. P. L. Binns, to No. 216 Sqdn., Egypt; 21.6.25.

Pilot Officers: W. S. Barnicott, P. E. Berryman, J. W. Busted, G. P. Butcher, H. A. S. Byrne, A. H. Campbell-Horsfall, E. H. Collinson, M.C., H. V. Crowder, F. G. H. Ewens, S. B. Flood, M. H. Frame, J. N. Goodwyn, J. A. Hawkings, L. M. S. Knight, C. A. C. Patton, E. C. L. Richardson, W. L. Robertson, W. J. M. Spaight, N. E. C. Squire, I. R. Sweeting, W. S. Townend, P. G. Tweedie, E. J. H. Wathen, and R. C. Whittle. All posted to the R.A.F. Depot on appointment to Short Service Commns. (on probation);

7.7.25. W. C. Adams, to No. 70 Sqdn., Iraq; 23.6.25. A. J. L. Hughes, to R.A.F. Depot, on appointment to a Short Service Commn.; 13.7.25.

Stores Branch

Flight Lieutenants: J. K. McDonald, to Air Ministry, 10.8.25. T. A. G. Hawley, to No. 1 Stores Depot, Kidbrooke, 10.8.25. J. Roberts, to No. 4 Stores Depot, Ruislip, 4.8.25.

Medical Branch

Flight Lieutenants: J. K. R. Landells, M.B., to R.A.F. Depot, 1.8.25. (Hon. S./Ldr.) W. R. Reith, M.D. A.M., to Inspector of Recruiting, 4.8.25.

Flight Lieutenant (Dental) H. E. Flavelle, to No. 5 Flying Training Sch., Sealand, 27.7.25.

Flying Officer (Dental) V. P. Ellis, to H.Q., Cranwell, 22.7.25.

Flying Officer P. D. Barling, M.B., to Central Med. Board, Hampstead, 4.8.25.

Naval Appointments

The following were notified by the Admiralty on July 22:—*Lieutenants (F.O., R.A.F.)*: H. L. St. J. Fancourt, R. A. Peyton, and E. E. Blackwell, to *Eagle*, and for 422 Flight, 18.7.25.

Promotions

Royal Marines

Captain (F.O., R.A.F.): E. J. O. Ellison, to *Eagle* and for 422 Flight, 18.7.25.

Royal Air Force

Flying Officer G. A. R. Muschamp, to *Eagle*, for technical engine duties, 16.7.25.

ROYAL AIR FORCE CADETSHIPS

THE Air Ministry announces that the next examination of candidates for entry as flight cadets to the Royal Air Force Cadet College, Cranwell, in January, 1926, will begin on November 17. On this occasion not less than 35 cadetships will be offered. Forms of entry which can be obtained from the Secretary, Civil Service Commission, Burlington Gardens, W. 1, will not be accepted, in any circumstances, later than September 17th.

Candidates, who should be medically fit and be between the ages of 17½ and 19½ will, with the exception of those nominated by the Air Council on the recommendation of Headmasters, be required to produce school certificates A or B, obtained by passing certain specified examinations. For this examination candidates who can show that for sufficient reason they have been prevented from obtaining a school certificate may be allowed to compete at the discretion of the Air Council.

The examination is, in the main, a written one, which is held in London and at various other centres, but each candidate must also attend an Interview Board at the Civil Service Commission. Successful candidates, after passing the Royal Air Force Medical Board, undergo a two years' course at the College where in addition to continuing their general education, they receive a thorough training in all questions concerning military aviation and cognate subjects, and also graduate as service pilots following a lengthy period of flying training from skilled instructors.

The expansion of the Royal Air Force in accordance with the Home Defence Scheme makes it necessary to obtain a considerably increased number of candidates for cadetships. The Air Ministry therefore desire to call attention to the career which the Royal Air Force offers. On passing successfully out of Cranwell flight cadets are granted permanent commissions. They have before them a life career with good prospects of rising by their own efforts to the highest ranks.

There is no question of their compulsory retirement on the ground that they have become too old for service as pilots. The work offers great scope both in its military and in its technical aspects to young men of ability, and facilities are given to officers to specialise in aeronautical engineering, wireless telegraphy, aerial gunnery and other subjects.

The total cost to a parent of putting his son into the Royal Air Force through Cranwell is about £250 for the two years' course. For flight cadets who are successful in obtaining prize cadetships or who are eligible for reductions in fees in respect of their father's service in the fighting forces the total cost of the two years' training is considerably less. On first commissioning as Pilot Officers at the age of 20 or 21, officers receive total emoluments amounting at present rates to about £450 a year and need no further assistance from their parents. After 18 months' service they become eligible for promotion to the rank of Flying Officer with substantially increased rates of pay, the total emoluments at present rate being about £540.

The Air Ministry considers that the career offered by the Air Force compares very favourably with that offered by any other profession and they desire to emphasise that to take advantage of that career it is quite unnecessary to be possessed of private means.

The expenses in Royal Air Force messes are strictly limited, and officers even of the most junior rank have no difficulty in living on their pay.

Full details as to entry into Cranwell are contained in Air Publication 121 "Regulations for admission to the Royal Air Force Cadet College" (price 6d. net), and more general information as to the career offered by the Royal Air Force is provided in an official handbook entitled "The Royal Air Force as a Career" (price 3s.). These publications can be obtained through any bookseller or direct from H.M. Stationery Office, Kingsway, W.C. 2.

IN PARLIAMENT

Air Ministry Offices

Captain GARRO-JONES, on July 20, asked the Secretary of State for Air whether it is proposed to move a portion of the Air Ministry from Kingsway to Whitehall; what premises they propose to occupy; and what will be the advantage of this duplication of offices?

The Under-Secretary of State for Air (Major Sir Philip Sassoon): Offices in Gwydyr House, Whitehall, have lately been taken over by the Secretary of State and myself with our personal staffs, the object in view being proximity to the Houses of Parliament and other Ministers. The Directorate of Civil Aviation has also moved to Gwydyr House; but the accommodation available there is insufficient to permit of any other considerable section of the Ministry being removed from the existing offices in Kingsway.

Captain Garro-Jones: Is it intended that the rest of the Air Ministry should be removed to the same premises at present or at some future time, and if the House refuses the money required to erect the new building will the hon. Baronet give authority to go back to Kingsway?

Sir P. Sassoon: That is a hypothetical question which I cannot be expected to answer, but as the hon. Member has referred to the erection of new buildings I should say that the Air Ministry at present is occupying premises under a very expensive lease, and both for reasons of economy as well as of convenience it may be found desirable to find other accommodation.

Aircraft Construction and Germany

LIEUT.-COLONEL SIR FREDERICK HALL asked the Secretary of State for Air whether his attention has been called to the fact that a Dutch company of aeroplane constructors have recently received an order for a thousand full-strength aeroplanes, which are being paid for through a German bank; if he can state what is the number of such machines which are now under German ownership and control, although not actually constructed in that country; and whether, in view of the importance of the matter, the Allies have made any representations to the German Government on the subject?

Sir P. Sassoon: As regards the first part of the question, I understand that there have been rumours on the subject, but I cannot accept any responsibility for their accuracy. As regards the second part of the question I have no information, and the third part does not, therefore arise.

Sir F. Hall: Have the Air Ministry taken any steps to find out from the Dutch manufacturers whether there is any truth in the suggestion or the rumour to which the question refers?

Sir P. Sassoon: Yes, we have taken steps to find out, and we have no information to the effect that Germany is engaged in the manner suggested in this question. If the hon. and gallant Member has any information to give to us we shall be very glad to receive it.

Sir F. Hall: Is a Dutch company manufacturing aeroplanes for Germany or is it not?

Sir P. Sassoon: The suggestion in the question is that Germany is trying to evade her obligations under the Treaty. We have no information about that.

Sir F. Hall: On a point of Order. In my question there is no suggestion as to the evasion of obligation on the part of Germany. Can I have an answer to the important question which is asked?

Mr. Speaker: The hon. and gallant Member asks the Secretary of State for Air, "Whether his attention has been called to the fact"—I presume that he has satisfied himself that it was a fact before putting down the question, and perhaps he will supply the Ministry with what is his evidence.

Captain Benn: May I ask the hon. Baronet for an explanation of what a full-strength aeroplane is?

Mr. Speaker: Not now—in private.

Air Mails

COLONEL DAY, on July 21, asked the Postmaster-General if he will consider causing facilities for all air-mail rates to be more extensively advertised than at present, and will be consider the advisability of supplying air stamps

to the values of 2d., 3d. and 4d., such issues to be valid for air-mail letters only?

Sir W. Mitchell-Thomson: The existing arrangements for giving publicity to the facilities afforded by air mails will shortly be supplemented by a poster in colour. I shall be glad to consider any suggestion which the hon. member may care to send me. The blue labels issued free of charge are found to be much more suitable for the purpose of distinguishing letters intended for conveyance by air than a special postage stamp.

Ministry of Air Offices

MR. BRIGGS asked the Under-Secretary of State for the Home Department, as representing the First Commissioner of Works, the annual rental of Adastral House, Kingsway, occupied by the Ministry of Air, and the length of its lease; and if he will consider the removal of the Ministry to less expensive but equally suitable premises at an early date?

Mr. Locker-Lampson: The rent of Adastral House is £40,000 per annum. The lease is one of 21 years from March 25, 1919. There is no building available in a suitable position in which sufficient accommodation for the Air Ministry would be afforded.

Airship Service

MR. VIANI, on July 22, asked the Secretary of State for Air (1) what is the estimated cost of the repairs to the R.33; when will this airship be ready to continue her experimental flights; when will the experts be able to decide upon the improvements to be embodied in the repairs to the mooring mast at Pulham; and when will the mast be ready for use;

(2) when the completion of the mooring mast and air station, including hydrogen producing plant, at Ismailia is expected; when will the R.36 be ready for the experimental service to Egypt; and what is the estimated cost of re-conditioning the R.36 for this service?

Sir P. Sassoon: I will answer the hon. member's questions with regard to the R.33 and R.36 together, a differentiation of cost between the two airships being extremely difficult, both because they have been under repair simultaneously and because the accident to the R.33 has affected the work on the R.36. The cost of the direct labour and material for the repair of both the airships is estimated at £32,000, to which must be added the cost of a complete set of gas bags, namely, £24,000; this was necessary because only one set of serviceable gas bags could be made available out of those originally in the two airships. The repair to R.33, which has involved practically a re-design of the forepart of the airship, should be completed by the middle of September, and the airship should be fully inflated and ready for flight three weeks from that date. The details of the repairs to the mooring mast at Pulham will be completed very shortly and the mast should be ready for use at the end of September. In view of the delays in the original programme that have been caused by the accident to the R.33, it is not now proposed to carry out the mooring mast and other flying trials in Egypt before the late spring or early summer of 1926, by which time both the base at Ismailia and the repair of R.36 should have been completed.

Mr. Viani asked whether, in view of the fact that the nearest mooring mast, at Ismailia, is approximately 1,900 miles away, and the safety and reliability of airships for commercial purposes has not yet been proved, it is intended to try out the vessels which are intended for this service regularly on a route in this country, where mooring masts are already in existence, before attempting the Egyptian service?

Sir P. Sassoon: The hon. member is apparently under a misapprehension, there being no intention to establish a State airship service to Egypt. I may say, however, that, in view of the fact that the two new airships are to be of much larger dimensions than any hitherto built, an exhaustive programme of research and experiment is being carried out in connection with their construction.

THE UNIVERSITY OF LONDON AND AERONAUTICS

It may not, perhaps, be generally known that the subject of aeronautics has for some years past formed an important item on the "programme" at East London College (University of London). In fact, for the third successive year an optional paper on aeronautical work has been set for the B.Sc. degree of the University of London—although not everyone would recognise this, perhaps, under its title of "Mechanics of Fluids, Section C"! A glance at the questions, or syllabus, however, shows that this aeronautical section is practically identical with that adopted by the Royal Aeronautical Society for their examinations in aerodynamics. We are assured by the Aeronautical Section of East London College that this section has proved very successful, and that a candidate following a reasonable course of reading can do just as well in aerodynamics as in the other papers he must take. It may be of interest to note that this College possesses an excellent aeronautical laboratory with first-rate equipment, including four-foot and other wind channels, examples of full-scale aircraft, parts of engines, &c. Dr. N. A. V. Piercy, who is in charge of the Aeronautical Laboratory informs us that the College is not endowed in the subject of aeronautics, and has put up a great fight, at considerable financial loss, for the cause of the undergraduate training in this branch of engineering. However, their efforts have met with every success, and several students have secured positions in technical aeronautics—indeed, it has not been possible to meet the demand. Dr. Piercy, nevertheless, considers that a much greater number of engineering students could profitably give attention to aerodynamics, to the exclusion of some more specialised subject less likely to be of use to them and of less educational value—for there appears to be a steady demand in the industry for students satisfactorily completing a primary training in aeronautical engineering. Readers of FLIGHT, therefore who may be interested in this matter can obtain full particulars on applying to the East London College, Mile End Road, E.1, or to Dr. N. A. V. Piercy, 3, King's Bench Walk, Temple, E.C.4.

NEW PARCEL AIR MAIL TO SWITZERLAND

THE Postmaster-General announces that, starting from July 28, a new air parcel service to Switzerland was inaugurated. Parcels intended for transmission by this service will be forwarded from London, usually on the morning after posting, by direct aeroplane each weekday to Bale or Zurich (i.e., by the route numbered 2 on page 2 of the Air Mail leaflet of June, 1925), and should normally be delivered at any address in Switzerland on the second or third day after posting, that is to say, two or three days earlier than if sent all the way by ordinary service.

The special fee payable, inclusive of inland as well as air conveyance (but exclusive of express delivery, the charge for which is 6d. per parcel), is as follows:—

For a parcel weighing up to 2 lb., 3s. 0d.; 2-7 lb., 7s. 6d.; 7-11 lb., 11s. 6d. For the present no parcel weighing over 11 lb. will be accepted, and there will be no facilities for insurance, payment of cash on delivery, or payment by the sender of customs duty. For customs clearance at the aerodrome at Bale or Zurich, as the case may be, and for subsequent delivery at the place of address, an inclusive charge of 1 franc 30 centimes will be collected from the addressee.

Air parcels can be posted at any district or branch Post Office in London, and at any Head Post Office (and, in some cases, at one or more subordinate offices also) in the provinces.

Except as shown above, the regulations of the ordinary parcel post to Switzerland will apply. The Customs declarations and despatch note relative to an air parcel for Switzerland should be made out with special care and accuracy in order that there may be no avoidable delay in delivery of the parcel after it has reached that country. The sender must see that, either before or at the time of posting, an air mail label is carefully affixed to the parcel close to the address where it will not easily be overlooked.

For information as to the latest time at which a parcel may be posted at a given Post Office for air transmission to Switzerland next day, enquiry should be made of the local head Post Office.

ROYAL AERONAUTICAL SOCIETY

(Official Notices)



August Race Meeting at Lympne Aerodrome, August 1 to 3.—During the August Race Meeting, a room situated in the annex of No. 3 hangar will be set aside for the use of members of the Society.

R.38 Memorial Prize, 1925.—The R.38 Memorial Prize for 1925 has been awarded to Mr. R. A. Frazer, B.A., Associate Fellow, for his paper on "The Rigid Airship in Relation to Full-Scale Experiments."

Elections.—The following members have recently been elected:—

Fellows: Major-General Sir W. Sefton Brancker, K.C.B., A.F.C., and Mr. A. H. R. Fedden.

Associate Fellows: Mr. C. Griffith Brewer, Mr. H. L. Davies, Mr. J. H. Hartley, Squadron-Leader E. L. Howard-Williams, M.C.; Mr. A. J. Hughes; F/O. E. J. Kingston-McCloughry, D.S.O., D.F.C.; Mr. R. A. Logan; Mr. B. L. Martin; Mr. G. J. Mead; Capt. F. W. Merriam; Mr. R. A. Tarleton and F/O. E. C. Wackett.

Students: Mr. W. J. Bernhard; Mr. J. L. Merrill, F/O. O. R. Pigott and Mr. T. Raftopoulos.

Foreign Members: Naval Flying Officer E. A. Brunner; Mr. Chang S-Lin and Mr. E. A. Stalker.

Associate Members: F/O. R. Collins; Group Captain P. F. M. Fellowes, D.S.O.; Mr. E. G. Richardson, Ph.D. and Squadron-Leader W. G. Sitwell, D.S.C.

J. L. PRITCHARD, *Hon. Secretary.*

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The Royal Air Force Memorial Fund

The usual fortnightly Meeting of the Grants Sub-Committee of the Fund was held at Iddesleigh House, on July 23. Lieut.-Commander H. E. Perrin was in the Chair, and the other members of the Committee were:—Mrs. L. M. K. Pratt-Barlow, O.B.E.; Mr. W. S. Field. The Committee considered in all 17 cases, and made Grants to the amount of £116 9s. 8d. The next Meeting was fixed for August 6.

Air Ministry, Gwydyr House, Whitehall

SIR SAMUEL HOARE (Secretary of State for Air), Sir Philip Sassoon (Under Secretary), and Sir Sefton Brancker (Director of Civil Aviation) are now, with their staffs, "Located," as they say in America, in Gwydyr House, Whitehall.

A New Aircraft Carrier — in 1930

In the new programme of naval construction, outlined by the Prime Minister in the House of Commons on July 23, and contained in an explanatory memorandum by Mr. Bridgeman, the First Lord of the Admiralty, provision is made for one aircraft carrier, to be constructed in 1929-30.

Another Italian Air Tour

The Italian Commission for Aeronautics has organised a second long-distance flight which will take place from August 5 to August 10.

Three Fiat B.R. 1 biplanes, under the command of Commandant Bolognese, will leave Turin for Moscow, via Udine, Belgrade, Bucharest, Odessa, and Kharkoff, the return journey being made by way of Kieff, Odessa, Bucharest, Stambul, Sofia, Belgrade, and Udine.

Egyptian Aviation

The Egyptian Council of Ministers has approved the dispatch of two parties, one military and one civilian, to Europe for training in aviation, and an immediate start on the construction of aerodromes at Cairo and Alexandria.

German Air Traffic

FIGURES giving the number of miles flown, passengers carried, etc., on the Deutsch Aero Lloyd and the Junkers-Luftverkehr air lines have just been issued. The total figures for both these companies during this period show an increase of 200 per cent. on the figures for the whole of 1923. The January-June figures are as follows:—

Deutsch Aero Lloyd.—Mileage flown, 559,242; passengers carried, 15,200; freight and baggage carried, 103 tons. Junkers-Luftverkehr.—Mileage flown, 937,233; passengers carried, 28,389; freight and baggage carried, 129 tons, and 36 tons of mails.

New Air Services

Air mail services have been started between Melbourne and Hay, and Melbourne and Broken Hill, in Australia. Two new air lines are also reported from Germany, operated by Junkers-Luftverkehr, one between Berlin and Amsterdam, and the other between Berlin and Bremen.

PUBLICATIONS RECEIVED

Aeronautical Research Committee Reports and Memoranda No. 933 (Ae. 154).—Forces and Moments on a Model Fairey N.4 Flying Boat "Aralanta," at Various Angles of View. By H. B. Irving and A. S. Batson. November, 1924. Price 1s. net. No. 941 (M.N. 8).—Measurement of Vertical Currents in the Lowest Layers of the Atmosphere during Sea Breezes. By J. Durward. August, 1923. Price 6d. net. No. 952 (Ae. 171).—Further Experiments on Honeycomb Radiators. By R. G. Harris and L. E. Caygill. November, 1924. Price 1s. 3d. net. No. 958 (Ae. 177).—Lift and Drag of Two Aerofoils Measured over 360° Range of Incidence. By C. N. H. Lock and H. C. H. Townend. November, 1924. Price 6d. net. H.M. Stationery Office, Kingsway, London, W.C. 2.

The Future. By Prof. A. M. Low. George Routledge and Sons, Ltd. Price 5s. net.

U.S. National Advisory Committee for Aeronautics. Reports: No. 201.—The Effects of Shielding the Tips of Airfoils. By E. G. Reid. No. 206.—Non-metallic Diaphragms for Instruments. By H. N. Eaton and C. T. Buckingham. No. 207.—Aerodynamic Characteristics of Airfoils at High Speeds. By L. J. Briggs, G. F. Hull, and H. L. Dryden. No. 213.—A Résumé of the Advances in Theoretical Aeronautics made by Max M. Munk. By J. S. Ames. U.S. National Advisory Committee for Aeronautics, Washington, D.C., U.S.A.

Air Ministry Meteorological Office: Professional Notes No. 41—Upper Air Temperatures in Egypt. By E. V. Newnham, H.M. Stationery Office, Kingsway, London, W.C. Price 3d. net.

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